

ASRS Database Report Set

Global Positioning System (GPS) Reports

Report Set Description	A variety of reports referencing use of Global Positioning System (GPS) devices.
Update Number	5.0
Date of Update	December 6, 2002
Number of Records in Report Set	50
Number of New Records in Report Set	8
Type of Records in Report Set	For each update, new records received at ASRS will displace a like number of the oldest records in the Report Set, with the objective of providing the fifty most recent relevant ASRS Database records. Records within this Report Set have been screened to assure their relevance to the topic.

IHS:262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports


The attached material is furnished pursuant to a request for data from the NASA Aviation Safety Reporting System (ASRS). Recipients of this material are reminded of the following points, which must be considered when evaluating these data.

ASRS reports are submitted voluntarily. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System.

Reports submitted to ASRS may be amplified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information may or may not be correct in any or all respects. At best, it represents the perception of a specific individual who may or may not understand all of the factors involved in a given issue or event.

After preliminary processing, all ASRS reports are de-identified. Following de-identification, there is no way to identify the individual who submitted a report. All ASRS report processing systems are designed to protect identifying information submitted by reports, such as, names, company affiliations, and specific times of incident occurrence. There is, therefore, no way to verify information submitted in an ASRS report after it has been de-identified.

The National Aeronautics and Space Administration and its ASRS contractor, Battelle Memorial Institute, specifically disclaim any responsibility for any interpretation which may be made by others of any material or data furnished by NASA in response to queries of the ASRS database and related materials.

A handwritten signature in black ink that reads "Linda J. Connell". The signature is written in a cursive, flowing style.

Linda J. Connell, Director
Aviation Safety Reporting System

CAVEAT REGARDING STATISTICAL USE OF ASRS INFORMATION

Certain caveats apply to the use of ASRS statistical data. All ASRS reports are voluntarily submitted, and thus cannot be considered a measured random sample of the full population of like events. For example, we receive several thousand altitude deviation reports each year. This number may comprise over half of all the altitude deviations that occur, or it may be just a small fraction of total occurrences.

Moreover, not all pilots, controllers, air carriers, or other participants in the aviation system, are equally aware of the ASRS or equally willing to report to us. Thus, the data reflect **reporting biases**. These biases, which are not fully known or measurable, may influence ASRS statistics. A safety problem such as near midair collisions (NMACs) may appear to be more highly concentrated in area "A" than area "B" simply because the airmen who operate in area "A" are more supportive of the ASRS program and more inclined to report to us should an NMAC occur.

One thing that can be known from ASRS statistics is that they represent the **lower measure** of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 1999 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 1999.

Because of these statistical limitations, we believe that the **real power** of ASRS lies in the **report narratives**. Here pilots, controllers, and others, tell us about aviation safety incidents and situations in detail. They explain what happened, and more importantly, **why** it happened. The values of these narrative reports lie in their qualitative nature. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.

ANOMALY DEFINITIONS

AIRCRAFT EQUIPMENT PROBLEM : CRITICAL Aircraft equipment problem that is vital to the safety of the flight.

AIRCRAFT EQUIPMENT PROBLEM : LESS SEVERE Not qualifying as a critical aircraft equipment problem.

AIRSPACE VIOLATION : ENTRY As explained in FAR PART 91.

AIRSPACE VIOLATION : EXIT As explained in FAR PART 91.

ALTITUDE DEVIATION A departure from or failure to attain or failure to maintain an ATC assigned altitude. It does not include an injudicious or illegal altitude in VFR flight where no altitude has been assigned by ATC or specified in pertinent charts. An aircraft climbs or descends through the assigned altitude.

ALTITUDE DEVIATION : UNDERSHOOT An aircraft fails to reach an assigned altitude during climb or descent.

ALTITUDE DEVIATION : OVERSHOOT An aircraft passes an assigned altitude during climb or descent.

ALTITUDE DEVIATION : EXCURSION FROM ASSIGNED ALTITUDE An aircraft departs from level flight at an assigned altitude.

ALTITUDE DEVIATION : CROSSING RESTRICTION NOT MET Charted or assigned altitude crossing restriction not met.

OTHER SPATIAL DEVIATION : ALTITUDE HEADING RULE DEVIATION Altitude does not match heading flown as specified in FAR 91.159.

OTHER SPATIAL DEVIATION : CONTROLLED FLIGHT TOWARDS TERRAIN Flying at an altitude that would, if continued, result in contact with terrain.

OTHER SPATIAL DEVIATION : TRACK OR HEADING DEVIATION Failure to fly planned or assigned heading/track.

GROUND EXCURSION : RAMP An aircraft exits the ramp pavement.

GROUND EXCURSION : RUNWAY An aircraft exits the runway pavement.

GROUND EXCURSION : TAXIWAY An aircraft exits the taxiway pavement.

GROUND INCURSION : TAXIWAY The erroneous or improper occupation of a taxiway or its immediate environs by an aircraft or other vehicle so as to pose a potential collision hazard to other aircraft using the taxiway, even if no such aircraft were actually present.

GROUND INCURSION : LANDING WITHOUT CLEARANCE A runway incursion specifically involving landing without a landing clearance or landing on the wrong runway.

GROUND INCURSION : RUNWAY The erroneous or improper occupation of a runway or its immediate environs by an aircraft or other vehicle so as to pose a potential collision hazard to other aircraft using the runway, even if no such aircraft were actually present.

GROUND ENCOUNTERS : ANIMAL An encounter with an animal while the aircraft is on the ground

GROUND ENCOUNTERS : FOD An encounter with any foreign objects while the aircraft is on the ground

GROUND ENCOUNTERS : PERSON An encounter with a person while the aircraft is on the ground

GROUND ENCOUNTERS : VEHICLE An encounter with a vehicle while the aircraft is on the ground

GROUND ENCOUNTERS : GEAR UP LANDING A landing performed with the aircraft gear up, whether mechanically failed or left up inadvertently.

CONFLICT : NMAC (NEAR MIDAIR COLLISION) A conflict is defined as the existence of a perceived separation anomaly such that the pilot(s) of one or both aircraft take evasive action; or are advised by ATC to take evasive action; or experience doubt about assurance of continuing separation from the viewpoint of one or more of the pilots or controllers involved. A near midair collision is when the flight crew reports, either directly or as quoted by the controller, that the reported miss distance is less than 500 feet.

CONFLICT : AIRBORNE, LESS SEVERE A conflict not qualifying as an NMAC.

CONFLICT : GROUND, CRITICAL A ground occurrence that involves two or more aircraft, at least one of which is on the ground at the time of the occurrence. The flight crew reports, either directly or as quoted by a controller, that they took evasive action to avoid a collision (emergency action go around, veering on runway or taxiway, takeoff abort, or emergency braking), and the balance of the report, including the narrative is judged consistent with a critical occurrence.

CONFLICT : GROUND, LESS SEVERE A ground conflict not qualifying as critical.

IN-FLIGHT ENCOUNTER : BIRDS In-flight encounter with a bird or birds.

IN-FLIGHT ENCOUNTER : TURBULENCE In-flight encounter with weather-related or clear air turbulence.

IN-FLIGHT ENCOUNTER : SKYDIVERS In-flight encounter with one or more skydivers.

IN-FLIGHT ENCOUNTER : WAKE TURBULENCE In-flight encounter with turbulence created by another aircraft.

IN-FLIGHT ENCOUNTER : WEATHER In-flight encounter with weather (e.g., windshear, clouds, high winds, storms).

IN-FLIGHT ENCOUNTER : VFR IN IMC Flight into IMC when not on an instrument flight plan and/or when not qualified.

IN-FLIGHT ENCOUNTER : OTHER In-flight encounter with anything not included above.

VFR IN IMC Flight into IMC when not on an instrument flight plan and/or when not qualified.

MAINTENANCE PROBLEM : IMPROPER MAINTENANCE Maintenance performed contrary to procedures, or not performed at all.

MAINTENANCE PROBLEM : NON COMPLIANCE WITH MEL Not following the MEL, or misinterpreting the MEL.

MAINTENANCE PROBLEM : IMPROPER DOCUMENTATION Incorrectly or incompletely filling out aircraft log books, or not returning logs to the aircraft when complete.

CABIN EVENT : GALLEY FIRE Fire emanating from the aircraft galley.

CABIN EVENT : PASSENGER MISCONDUCT Any misconduct on the part of the passenger, including aggression, intoxication, or not following safety regulations.

CABIN EVENT : PASSENGER ILLNESS Any passenger illness.

CABIN EVENT : PASSENGER CONTRABAND Items carried by passengers that could constitute a safety hazard to the aircraft, crew, or other passengers, including weapons or hazardous materials. Also personal bottles of alcohol.

CABIN EVENT : OTHER Any cabin event not specified above.

NON ADHERENCE : CLEARANCE Non-adherence to an ATC clearance.

NON ADHERENCE : COMPANY POLICIES Non-adherence to any policies or procedures required by the company operating the aircraft.

NON ADHERENCE : FAR Non-adherence to a Federal Aviation Regulation.

NON ADHERENCE : PUBLISHED PROCEDURE Non-adherence to approach procedure, standard instrument departure, STAR, profile descent, or operational procedure as described in the AIM or ATC facility handbook.

NON ADHERENCE : REQUIRED LEGAL SEPARATION Less than legal separation between two airborne aircraft (as legal separation is defined for the airspace involved).

NON ADHERENCE : OTHER Non-adherence to SOPs for aircraft, etc.

OTHER ANOMALY : LOSS OF AIRCRAFT CONTROL Inability to control pitch, roll, and yaw as intended.

OTHER ANOMALY : UNSTABILIZED APPROACH

OTHER ANOMALY : SPEED DEVIATION Aircraft speed contrary to FARs or controller instruction.

OTHER ANOMALY : SMOKE OR FIRE Smoke or fire present in the aircraft, except in the galley.

OTHER ANOMALY : HAZARDOUS MATERIAL VIOLATION Carriage of hazardous materials without proper procedures being followed.

OTHER ANOMALY : FUMES Fumes of any origin present in the aircraft.

Time

Date : 200101

Day : Mon

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : PIB.Airport

State Reference : MS

Altitude.MSL.Bound Lower : 3500

Altitude.MSL.Bound Upper : 4000

Environment

Flight Conditions : IMC

Ceiling.Single Value : 800

Aircraft / 1

Controlling Facilities.ARTCC : ZHU.ARTCC

Operator.General Aviation : Corporate

Make Model : Citation II

Mission : Business

Navigation In Use.Other : GPS

Flight Phase.Descent : Vacating Altitude

Route In Use.Arrival : On Vectors

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 14000

Experience.Flight Time.Last 90 Days : 40

Experience.Flight Time.Type : 1500

ASRS Report : 499900

Person / 2

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 5000

Experience.Flight Time.Last 90 Days : 20

Experience.Flight Time.Type : 4000

ASRS Report : 499901

Person / 3

Function.Controller : Radar

Events

Anomaly.Altitude Deviation : Overshoot

Anomaly.Non Adherence : Clearance

Independent Detector.Other.ControllerA : 3

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

DURING DSCNT TO 4000 FT MSL, CTR CLRED US TO THE OM TO HOLD. PASSING 5000 FT, ALT ALERT SOUNDED AND BOTH PLTS CONFIRMED 1000 FT TO GO. WE WERE UNABLE TO PUT THE OM IN THE LONG RANGE NAV RADIO, SO BOTH PLTS HAD THEIR HEADS DOWN ON THE NAV SYS. THE ALT HOLD DIDN'T CATCH THE ALT AT 4000 FT, ACFT DSNDDED TO 3500 FT. PF CAUGHT THE ALT JUST BEFORE CTR. CTR STATED TO 'MAINTAIN 4000 FT, I SHOW YOU AT 3500 FT.' WE ACKNOWLEDGED AND CLBED BACK TO 4000 FT. THE SOLUTION IS THE PF CONTINUES TO FLY THE AIRPLANE (HAVE WE HEARD THIS BEFORE?) AND THE PNF HANDLES THE NAV SYS. NO EVASIVE ACTION WAS TAKEN.

Synopsis :

C550 CREW PREOCCUPIED WITH GPS, OVERSHOT ASSIGNED ALT.

Time

Date : 200102

Day : Thu

Local Time Of Day : 0601 To 1200

Place

State Reference : NY

Altitude.MSL.Bound Lower : 17000

Altitude.MSL.Bound Upper : 17700

Environment

Flight Conditions : Marginal

Aircraft / 1

Controlling Facilities.TRACON : N90.TRACON

Make Model : Learjet 60

Navigation In Use.Other : FMS or FMC

Flight Phase.Climbout : Intermediate Altitude

Flight Phase.Cruise : Enroute Altitude Change

Flight Phase.Cruise : Holding

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 14500

Experience.Flight Time.Last 90 Days : 100

Experience.Flight Time.Type : 400

ASRS Report : 500110

Person / 2

Function.Flight Crew : Single Pilot

Person / 3

Function.Controller : Approach

Events

Anomaly.Altitude Deviation : Overshoot

Anomaly.Non Adherence : Clearance

Independent Detector.Other.ControllerA : 3

Independent Detector.Other.Flight CrewB : 1

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

OUR ACFT IS A GOV FLT INSPECTION ACFT. WE HAD JUST COMPLETED CERTIFICATION OF A NEW RNAV (GPS) RWY 16 TO HPN. WE WERE CLRED FROM OVER SAX TO CMH AS FILED (J80 BOWRR INTXN DIRECT). NEW YORK APCH WAS EXTREMELY BUSY AND BEGAN VECTORING US AROUND IN CIRCLES. I BELIEVE ZNY WOULD NOT TAKE THE HDOF. WE WERE BEING STEP-CLBED ABOUT 2000 FT AT A TIME. WE WERE CLRED TO 17000 FT, WHICH I ACKNOWLEDGED AND SET IN THE ALT ALERter. I THEN HAD MY HEAD DOWN PROGRAMMING THE FMS. NEARING 17000 FT THE CTLR TOLD US TO MAINTAIN 290 KTS. THE PF SELECTED THE SPD MODE ON THE AUTOPLT CTL PANEL. I BELIEVE THIS ACTION CANCELED THE ALT SELECT MODE. AT 17300 FT, I HEARD THE ALT ALERter WARNING. I LOOKED UP AND YELLED 'ALT, ALT.' THE PF CORRECTED TO 17000 FT. THE ONLY COMMENT FROM NEW YORK APCH WAS, 'ACFT X, MAINTAIN 17000 FT.' THE ACFT ACTUALLY CLBED TO 17700 FT DURING THIS INCIDENT.

Synopsis :

GOV FLT CHK LJ60 DISTR AND OVERSHOOTS ASSIGNED ALT.

Time

Date : 200102

Day : Fri

Local Time Of Day : 1801 To 2400

Place

State Reference : CA

Altitude.MSL.Bound Lower : 10000

Altitude.MSL.Bound Upper : 10500

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : SCT.TRACON

Operator.General Aviation : Corporate

Make Model : Citation II

Mission : Pleasure

Navigation In Use.Other : GPS

Flight Phase.Climbout : Vacating Altitude

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 9600

Experience.Flight Time.Last 90 Days : 45

Experience.Flight Time.Type : 1300

ASRS Report : 500140

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Departure

Person / 4

Function.Oversight : Supervisor

Events

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 3

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Resolatory Action.None Taken : Detected After The Fact

Consequence.Other : Company Review

Supplementary

Problem Areas : Company

Problem Areas : Flight Crew Human Performance

Narrative :

DEP: UDD. DEST: CRQ. PART 91 OWNER/OPERATOR WITH NO PAX. PF: OWNER. PNF: MYSELF. WX: VFR AT DEP/DEST AND ENRTE. DEPARTED NIGHT VFR FROM UDD, AN UNCTLED AIRFIELD, FOR A 20 MIN FLT TO CRQ WITH 2 CREW AND NO PAX. I (PNF) CONTACTED ATC ON DEP/CLBOUT TO PICK UP OUR IFR CLRNC TO OUR DEST (CRQ), APPROX CLBING THROUGH 7000 FT MSL. OUR CLRNC ISSUED WAS: PROCEED DIRECT TO TRM VOR, V208 OCN DIRECT, CLB AND MAINTAIN 10000 FT, EXPECT 12000 FT. I THEN LOOKED AT THE LOW ENRTE CHART TO LOAD THE FIXES INTO THE GPS. DURING THIS TIME, THE PF WAS HAND FLYING THE ACFT WHILE MY ATTN WAS CONSULTING THE CHART. SHORTLY AFTERWARDS, THE CTLR CALLED ME AND ASKED TO VERIFY OUR ALT. AT THAT TIME WE BOTH REALIZED WE WERE NEARING 10500 FT AND MANAGED TO STOP THE CLB AT 10500 FT AND AGGRESSIVELY CORRECT BACK DOWN TO OUR ASSIGNED ALT OF 10000 FT. THE NEXT ATC XMISSION INSTRUCTED US TO CONTACT ZLA. ZLA THEN CLRED US TO CLB TO 12000 FT. THIS IS THE TYPICAL SCENARIO WHERE NO ONE IS FLYING THE ACFT. THE PF'S ATTN SHOULD HAVE BEEN CTILING THE ACFT AND NOT ALSO TRYING TO LOAD FIXES INTO THE NAV EQUIP -- ESPECIALLY WHEN THE AUTOPLT IS OFF AND HAND FLYING. AFTER REVIEWING THE FLT LOG FOR THE DAY, I (PNF) HAD BEEN ON DUTY FOR 13 HRS AND 30 MINS BEFORE WE HAD EVEN DEPARTED. THIS MADE FOR A TOTAL DUTY DAY OF 14 HRS AND 45 MINS. THE PF'S TOTAL DUTY DAY WAS ONLY 1 HR 39 MINS, HOWEVER, IS PRIMARILY ASSIGNED TO DIFFERENT EQUIP. SINCE THIS IS THE SECOND ALTDEV IN LESS THAN 2 WKS WITH THE SAME PF, THE CHIEF PLT OF OUR COMPANY IS IN THE PROCESS OF CHANGING POLICY ON OUR PART 91 DUTY LIMITATIONS AND ACFT CURRENCY REQUIREMENTS FOR THOSE WHO FLY MORE THAN 1 ACFT.

Synopsis :

C550 CREW HAD ALT OVERSHOOT IN SCT CLASS E AIRSPACE.

Time

Date : 200102

Day : Tue

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : CVG.Airport

State Reference : KY

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft / 1

Operator.General Aviation : Corporate

Make Model : Cessna 120

Mission : Freight

Component / 1

Aircraft Component : Air/Ground Communication

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 7000

ASRS Report : 500380

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Airspace Violation : Entry

Anomaly.Incursion : Landing Without Clearance

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Resolatory Action.None Taken : Anomaly Accepted

Consequence.Other : Company Review

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

ON FEB/TUE/01, I HAD A LOST COM SIT DEVELOP ON THE FINAL LEG OF A 6 LEG CARGO MISSION UNDER PART 135 RULES. ACTUALLY, I HAD A 'HOT MIKE' THAT I COULD NOT GET RID OF OR REALLY KNOW WHAT TO DO WITH. I WAS IFR IN VMC. MY CHARTS WERE ALL CURRENT. I HAD NOT LOOKED AT A VFR CHART FOR A LONG TIME. I KNEW I SHOULD HAVE JUST LANDED AS SOON AS PRACTICABLE, BUT I REALLY DIDN'T KNOW WHERE THE NEAREST ARPT WAS. I HAD A LOAD OF FINANCIAL DOCUMENTS THAT REALLY SEEMED TO NEED TO GO TO LUK AND I WAS ALMOST THERE. I THOUGHT THAT THE CARGO WAS SO IMPORTANT AND IT NEEDED TO GET TO THE DEST SO BAD THAT I JUSTIFIED DEVIATING FROM REGS TO GET THE WORK IN ON TIME AT THE RIGHT PLACE. I FOLLOWED MY LAST VERBAL CLRNC AS I TRIED TO GET MY MIKE UNSTUCK. AS FAR AS ALT, I SORT OF MADE IT UP AS I WENT ALONG AND ENDED UP SOMEWHAT DUPLICATING WHAT I USUALLY GET ON A TYPICAL VISUAL APCH ON IFR RULES INTO LUK. THIS HAPPENED ON MY SCHEDULE IN WHICH I FLY 6 LEGS IN ABOUT 7 HRS OF FLT AND 12 HRS OF DUTY TIME. IT IS SINGLE PLT IFR IN A C210. I TRY TO FLY IT LIKE IT IS A HVY JUMBO JET AND I OFTEN MODEL MY RADIO PHRASEOLOGY AFTER THE JUMBO JET PLTS. WHAT REALLY CAUSED THIS OCCURRENCE (I BELIEVE) WAS A COM RADIO MALFUNCTION. IF I COULD HAVE HANDLED THE SIT AND EVENTS AFTER THE RADIO MALFUNCTIONED BETTER, I WOULD HAVE. I DIDN'T THINK TO SQUAWK LOST COM FOR QUITE A WHILE AFTER THE PROB WAS DETECTED AND THEN I COULD NOT REMEMBER IF 7600 WAS LOST COM OR 6500 WAS LOST COM. AND I DECIDED THAT KEEPING MY IFR ASSIGNED SQUAWK CODE WAS BETTER THAN ANYTHING ELSE AT THE TIME. I FLEW DIRECT CVG VOR TOWARD THE DEST ARPT FOR A LONG TIME AND SORT OF HAD IT BACKED UP WITH MY YOLK MOUNTED GPS UNIT. THE LAST ASSIGNED RTE WAS 'DIRECT' CVG VOR THEN 'DIRECT' LUNKEN AND THAT IS WHAT I WAS DOING, BUT I GOT A LITTLE BIT CONFUSED AS FAR AS HOW CLOSE I WAS. I THOUGHT I WAS 15 MI OUT THEN 35 MI OUT USING GPS AND DME. ONE PROB WAS I TURNED COM OFF FOR A MOMENT AND IT TURNED NAV OFF. I GOT AN ARPT IN SIGHT AND THOUGHT THAT THAT WOULD DO, AND THEN I REALIZED IT WAS COVINGTON INTL. MOMENTS LATER, I FOUND COVINGTON. I SPOTTED LUK IN DISTANCE UNDER SOME CLOUDS, AND I WAS UNSURE IF I COULD GET IN TO LUK WITHOUT GOING IMC. THEN I REALIZED FROM CURRENT POS TO LUK I WOULD HAVE TO CROSS FINAL APCH COURSE (CVG) AT FINAL APCH ALT. AND REALIZING I WAS NOW RIGHT NEXT TO COVINGTON AND PROBABLY IN EVERYBODY'S WAY, I JUST DECIDED TO GO IN AND LAND ON NEAREST, MOST OUT OF THE WAY RWY. I TURNED ON LNDG LIGHT AND NAV LIGHTS IN ADDITION TO STROBE AND BEACON THAT WERE ALREADY ON. ON FINAL, I SAW AN AIRLINER THAT WAS LINED UP WITH RWY AND ALMOST IMMEDIATELY REALIZED THAT IT WAS GOING AWAY FROM ME ON A DEP. THIS WAS A RELIEF, BECAUSE I KNEW I WAS AT LEAST SOMEWHAT GOING THE RIGHT WAY. I DIPPED AND ROCKED WINGS AND PITCHED NOSE UP AND DOWN ON FINAL ALL WHILE KEEPING A NORMAL GS AND NORMAL SPD INTO RWY AND ROLLED OFF RWY AS SOON AS I SAFELY COULD AND SHUT DOWN ON A TXWY. I WAS ESCORTED INTO FBO AND MET MY COURIER THERE AND LEFT THE PLANE ON THE RAMP FOR REPAIR TO BE MADE BY MY COMPANY. I RODE BACK TO LUK (DEST ARPT) WITH THE COURIER AND THE LOAD. WHEN I WAS SITTING IN THE NICE OFFICE AT FBO WATCHING THE AIRLINES TAKE OFF AND LAND, I THOUGHT TO MYSELF THAT I WOULD RATHER BE HERE THAN AT SOME 'PODUNK' LITTLE DIRT FIELD IN THE MIDDLE OF NOWHERE. I THINK I AM A BETTER PLT AND A BETTER PERSON AFTER THIS EXPERIENCE.

Synopsis :

C210 COURIER PLT HAS STUCK MIKE AND UNABLE TO COM ON IFR FLT IN VFR CONDITIONS. PLY CONTINUES FLT BUT ENTERS CLASS B AIRSPACE AT CVG ARPT. PLT ENTERS NORMAL PATTERN WITH ALL LIGHTS ON AND LWOC.

Time

Date : 200102

Day : Sat

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : SHN.Airport

State Reference : WA

Altitude.MSL.Single Value : 1000

Environment

Flight Conditions : VMC

Ceiling.Single Value : 15000

Aircraft / 1

Operator.General Aviation : Personal

Make Model : Small Aircraft, Low Wing, 1 Eng, Fixed Gear

Mission : Training

Navigation In Use.Other : GPS

Flight Phase.Descent : Approach

Route In Use.Approach : Visual

Aircraft / 2

Make Model : Mooney Acft Undifferentiated or Other Model

Flight Phase.Descent : Approach

Route In Use.Approach : Visual

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Last 90 Days : 1

Experience.Flight Time.Type : 300

ASRS Report : 500412

Events

Anomaly.Other Spatial Deviation : Uncontrolled Traffic Pattern Deviation

Anomaly.Conflict : NMAC

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Took Evasive Action

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

RPTR FLEW THE GPS RWY 23 APCH TO SHN FOR PRACTICE. AT ABOUT 7 MI FROM THE RWY THRESHOLD, CHANGED THE #1 COM RADIO (KING 155) FREQ TO THE CTAF 122.8, BUT DID NOT PUSH THE FLIP-FLOP SWITCH HARD ENOUGH TO CHANGE THE FREQ, AND DID NOT CHK THE INDICATION TO ENSURE XMISSION ON THE CORRECT FREQ. ANNOUNCED ON WRONG FREQ, ACFT IDENT AT SANDERSON FIELD, AND INTENTION TO PERFORM LOW APCH TO RWY 23. UPON DSNDING TO AND REACHING 1000 FT MSL AT APPROX 3 MI FROM THE THRESHOLD, OBSERVED WRONG COM FREQ SELECTED, SWITCHED FREQS TO CORRECT FIELD FREQ, AND HEARD ANNOUNCEMENT OF A MOONEY TURNING FINAL TO RWY 23. IMMEDIATELY LOOKED OUT TO L, AND OBSERVED MOONEY AT 9 O'CLOCK POS AND CONVERGING, ABOUT 100 FT UNDER MY ACFT, IN L-HAND TURN TO FINAL APCH COURSE. IMMEDIATELY APPLIED PWR AND INITIATED CLBING L-HAND TURN TO LEAVE MOONEY TO R OF RPTR ACFT. EVENT OCCURRED DUE TO VIOLATION OF FUNDAMENTAL RULE OF FLT OF TAKING ALL NECESSARY ACTIONS TO SEE AND BE SEEN. RPTR WAS UNAWARE OF OTHER ACFT IN DOWNWIND AND BASE LEG TO ACTIVE RWY BECAUSE OF NOT SELECTING CORRECT FIELD FREQ, AND BECAUSE OF PERFORMING ONLY CURSORY VISUAL CHKS OF THE OPERATING ENVIRONMENT FOR OTHER ACFT. RPTR FOCUSED TOO MUCH ATTN ON INST DISPLAYS AND LNDG RWY VERSUS OTHER AREAS OF POTENTIAL IMPACT. CONTRIBUTING TO THE POTENTIAL PROB, THE MOONEY DID NOT DISPLAY VISIBLE NAV LIGHTS NOR STROBE LIGHTS ON THE FUSELAGE NOR WINGS, AND WAS THEREFORE DIFFICULT TO SEE WITHOUT CLOSE SCRUTINY IN FADING LIGHT. RPTR'S ACFT WAS OPERATING NAV LIGHTS AND WINGTIP, DOUBLE FLASH STROBES, BUT APPARENTLY WAS NOT OBSERVED BY MOONEY PLT DUE TO PLT'S ATTN DIVERTED TO L OF ACFT (ONLY) IN PREPARATION FOR LNDG. TO PREVENT RECURRENCE, RPTR WILL BE MUCH MORE EMPHATIC ABOUT SEEING AND BEING SEEN, PARTICULARLY IN THE NEAR-ARPT ENVIRONMENT.

Synopsis :

SMA PLT HAD AN NMAC ON FINAL TO AN UNCONTROLLED ARPT.

Time

Date : 200102

Day : Tue

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : BFA.Airport

State Reference : MI

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Ceiling.Single Value : 3000

Aircraft / 1

Controlling Facilities.ARTCC : ZMP.ARTCC

Operator.General Aviation : Personal

Make Model : Golden Eagle 421

Mission : Pleasure

Flight Phase.Landing : Roll

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 4000

Experience.Flight Time.Last 90 Days : 20

Experience.Flight Time.Type : 1800

ASRS Report : 501100

Person / 2

Function.Controller : Radar

Events

Anomaly.Non Adherence : FAR

Independent Detector.Other.ControllerA : 2

Resolatory Action.None Taken : Detected After The Fact

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

IFR FLT PLAN PWK TO BFA. CLRED TO DSND TO 3500 FT BY ZMP. BROKE OUT AT 3500 FT 10 MI FROM THE ARPT. THEN CLRED FOR A VISUAL AND CANCELED MY GPS APCH. DECLARED THAT I HAD THE FIELD IN SIGHT. THE CTLR THEN INSTRUCTED ME TO CHANGE FREQ TO CTAF, WHICH I DID THINKING HE WAS CANCELING MY IFR FLT PLAN. WRONG! BECAUSE I DID NOT USE THE MAGIC WORD 'CANCEL.' CTR THEN HAD TO CHK WITH THE ARPT MGR TO BE SURE I HAD LANDED SAFELY. DO NOT FREQUENTLY FLY IFR INTO UNCTLED ARPTS, SO SLIPPED THIS TIME. SHOULD HAVE REMEMBERED, AS I WILL IN THE FUTURE, TO USE THE WORD 'CANCEL.

Synopsis :

C421 PLT FORGOT TO CLOSE HIS IFR FLT PLAN AFTER LNDG AT A NON TWR ARPT DUE TO THE HABIT OF HAVING AUTOMATIC FLT PLAN CLOSURE WHEN LNDG AT CTLED ARPTS.

Time

Date : 200102

Day : Wed

Local Time Of Day : 1801 To 2400

Place

Locale Reference.Airport : ROW.Airport

State Reference : NM

Altitude.MSL.Single Value : 5000

Environment

Flight Conditions : VMC

Ceiling : CLR

Aircraft / 1

Controlling Facilities.TRACON : ROW.TRACON

Controlling Facilities.Tower : ROW.Tower

Operator.General Aviation : Instructional

Make Model : PA-28 Cherokee/Archer II/Dakota/Pillan/Warrior

Mission : Training

Flight Phase.Climbout : Initial

Flight Phase.Climbout : Intermediate Altitude

Route In Use.Departure : On Vectors

Component / 1

Aircraft Component : Electrical Power

Aircraft Reference : X

Component / 2

Aircraft Component : Air/Ground Communication

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 2300

Experience.Flight Time.Last 90 Days : 500

Experience.Flight Time.Type : 200

ASRS Report : 501970

Person / 2

Function.Controller : Departure

Person / 3

Function.Controller : Local

Events

Anomaly.Aircraft Equipment Problem : Critical

Independent Detector.Other.Flight CrewA : 1

Resolutive Action.Flight Crew : Landed In Emergency Condition

Resolutive Action.Flight Crew : Overcame Equipment Problem

Consequence.Other : Maintenance Action

Supplementary

Problem Areas : Aircraft

Narrative :

RECEIVED TKOF CLRNC FROM ROW TWR OFF OF RWY 21. DEPARTED RWY 21 AND TOLD TO CONTACT DEP. LOST SIDE TONE IN HEADSETS AND CHKED CONNECTIONS. LIGHTS (CABIN) BEGAN TO FLICKER THEN NOTICED LOAD METER WAS AT ZERO AND SOON AFTER ALL RADIOS AND GPS INCLUDING EXTERIOR POS LIGHTS WERE OUT. UNABLE TO TALK TO DEP FOR ABOUT 5 MINS. TRIED COM WITH OUR XCEIVER BATTERY WENT DEAD SOON AFTER TURNING IT ON. FINALLY TURNED ALL LIGHTS OFF AND ABLE TO WORK 1 RADIO. SET XPONDER TO 7600 AND TALKED TO DEP. RECEIVED LNDG CLRNC FROM DEP CTLR AND EMER WAS DECLARED BY CTLR AND NOT THE PLT. ARF TRUCKS WERE FLUSHED FOR LNDG AND LNDG WAS ACCOMPLISHED WITHOUT INCIDENT.

Synopsis :

PIPER PA28-180 HAS ELECTRICAL PWR PROB DURING A NIGHT INITIAL CLBOUT RESULTING IN A RETURN LAND AND DEP CTLR DECLARING AN EMER FOR THE PLT.

Time

Date : 200102

Day : Mon

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : SMF.Airport

State Reference : CA

Altitude.MSL.Single Value : 500

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.Tower : SMF.Tower

Operator.General Aviation : Personal

Make Model : PA-28 Cherokee/Archer II/Dakota/Pillan/Warrior

Mission : Training

Navigation In Use.Other : GPS

Navigation In Use.Other : Loran

Route In Use.Approach : Instrument Precision

Component / 1

Aircraft Component : ILS/VOR

Aircraft Reference : X

Component / 2

Aircraft Component : GPS & Other Satellite Navigation

Component / 3

Aircraft Component : Loran

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 900

Experience.Flight Time.Last 90 Days : 45

Experience.Flight Time.Type : 700

ASRS Report : 502270

Person / 2

Function.Controller : Local

Person / 3

Function.Controller : Supervisor

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Airspace Violation : Entry

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 2

Independent Detector.Other.Flight CrewA : 1

Resolutive Action.Flight Crew : Became Reoriented

Resolutive Action.Flight Crew : Returned To Intended or Assigned Course

Resolutive Action.Flight Crew : Took Precautionary Avoidance Action

Consequence.FAA : Investigated

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

UNDER VFR CONDITIONS, REQUESTED VECTORS FROM BEALE AFB FOR ILS 15 APCH, LHM. PREFLT BRIEFING/RANCHO MURIETTA REVEALED NO NOTAMS AND ILS 15 AT LINCOLN OPERATIONAL (108.75). FOLLOWING VECTORS, I INTERCEPTED OUTBOUND 108 DEG RADIAL MARYSVILLE VOR (110.8) PLANNING TO INTERCEPT CODEY INTXN WHEN LOC MOVED TO CTRLINE. (I DID NOT IDENT LOC AND MORSE CODE, BUT DID LISTEN TO LINCOLN AWOS 2 TIMES). I DID NOT INTERCEPT LINCOLN LOC, BUT CONTINUED ON (108 DEG RADIAL MARYSVILLE VOR 110.8) EVEN THOUGH MY LORAN AND HAND-HELD GPS REVEALED I PASSED THROUGH APCH. WITHIN 1-2 MINS AT 2000 FT, I IDENTED VISUALLY WHAT I THOUGHT WAS RWY 15 AT LHM -- EVEN THOUGH LOC NOW SHOWED YELLOW FLAG. AT APPROX 1 MI FROM THRESHOLD, RWY 16 SHOWED CLRLY AND TO MY HORROR, I REALIZED I WAS APCHING RWY 16L AT SMF ARPT. I IMMEDIATELY PERFORMED A SHARP TURN TO E, CLBED TO 2000 FT AND CALLED SAC TWR ON 119.1 AND INFORMED THEM OF MY MISTAKE. THEY GAVE ME A PHONE NUMBER TO TWR WHICH I CALLED AFTER LNDG AT LINCOLN 15 MINS LATER. THEY WERE AS UPSET AS I WAS HORRIFIED AND EMBARRASSED. APPARENTLY THEY WERE LNDG ACFT ON RWY 34L&R AND T-33 DOING PRACTICE APCHS. FORTUNATELY, THERE WERE NO ACFT IN VICINITY AT THIS TIME. THEY WILL NOTIFY FSDO. ALTHOUGH I HAVE APPROX 200 HRS OF INST TIME, I HAVE SCHEDULED INSTRUCTION AT STOCKTON -- CFII AND FAA SAFETY INSTRUCTION. I AM ESSENTIALLY A PERFECTIONIST AND DO NOT WANT TO EVER MAKE A MISTAKE AGAIN, ESPECIALLY ONE THAT COULD HAVE BEEN CATASTROPHIC.

Synopsis :

PA28 PLT INCORRECTLY ASSUMES INSTS ARE INCORRECT AND MAKES A WRONG ARPT APCH.

Time

Date : 200102

Day : Thu

Local Time Of Day : 1801 To 2400

Place

Locale Reference.Airport : EKN.Airport

State Reference : WV

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : IMC

Ceiling.Single Value : 3500

Aircraft / 1

Controlling Facilities.TRACON : CKB.TRACON

Operator.General Aviation : Personal

Make Model : Super Skywagon/Stationair/Turbo Stationair 6

Mission : Pleasure

Navigation In Use.Other : GPS

Flight Phase.Landing : Roll

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 491

Experience.Flight Time.Last 90 Days : 76

Experience.Flight Time.Type : 354

ASRS Report : 502785

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Inflight Encounter : Weather

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.None Taken : Detected After The Fact

Consequence.FAA : Reviewed Incident With Flight Crew

Consequence.Other : Aircraft Damaged

Supplementary

Problem Areas : Flight Crew Human Performance

Problem Areas : Weather

Narrative :

I WAS ON AN IFR FLT FROM AVL TO EKN, WITH CIN AS AN ALTERNATE, LEAVING AVL AT APPROX XD30. THE TERMINAL FORECAST FOR EKN BTWN XA00-XG00 WAS TEMP VISIBILITY 3 MI, LIGHT SNOW SHOWERS, MIST, 2500 FT BROKEN. AFTER REVIEWING WX RADAR AND SATELLITE VIEWS, ALONG WITH 12 HR FORECAST, IT APPEARED THE WX WAS TO IMPROVE. I LEFT AVL WITH 2 PAX AT AN ALT OF 17000 FT, SUBSEQUENTLY MODIFIED TO 13000 FT. APPROX 15 MI FROM EKN, WHILE ABOVE THE CLOUDS, ATC DIRECTED ME TO DSND TO 7000 FT. AS I DSND'D THROUGH 10000 FT, I STARTED TO PICK UP ICE AND ASKED TO CLB BACK TO 10000 FT. ABOUT 30 MI AWAY AND N OF MY DEST, WAS ICE AT ABOUT 5000 FT. I LOST SOME OF THE ICE, BUT NOT ALL THAT I HAD PICKED UP EARLIER. I PICKED UP THE ASOS FOR EKN (CEILINGS AT 3500 FT, VISIBILITY 2 MI, SNOW AND WIND FROM 270 DEGS). I RADIOED CLARKSBURG THAT I WAS PREPARED FOR THE GPS APCH TO RWY 23 AT EKN. CLARKSBURG DIRECTED ME TO DSND TO 5000 FT AND PROCEED TO UGJOB, THE IAF FOR THE GPS TO RWY 23. SHORTLY AFTER BEGINNING THE DSCNT AND BEFORE ARRIVING AT UGJOB, I NOTICED I WAS BEGINNING TO PICK UP ICE AGAIN. THE PLANE REMAINED STABLE AT 120 KTS. I TURNED INBOUND AT UGJOB AT 5000 FT WHERE I REMAINED AS I APCHED MUHAP. I CROSSED MUHAP AT 5000 FT AND 120 KTS IN STABLE FLT AND BEGAN THE DSCNT TO 3500 FT PRIOR TO ELUXY, THE FAF. AT ELUXY I BEGAN MY DSCNT TO THE MDA AND BROKE OUT OF THE CLOUDS BTWN 3300-3200 FT. UNTIL I BROKE OUT OF THE CLOUDS, I CONTINUED TO PICK UP ICE ON MY DSCNT. AS I CROSSED THE MISSED APCH (TYGRT), MY AIRSPD REMAINED 120 KTS AND I HAD THE ARPT IN SIGHT AND WAS CONTINUING MY APCH TO LAND. I BEGAN TO SLOWLY REDUCE SPD AND CROSSED THE THRESHOLD OF THE ARPT AT ABOUT 25 FT AND 100 KTS. AS I GOT LOWER, I CONTINUED TO SLIGHTLY REDUCE SPD AND SLOWLY RAISE THE NOSE OF THE PLANE. AFTER MUCH THOUGHT, I BELIEVE I MUST HAVE BEEN 5-10 FT ABOVE THE RWY, CTRED FOR LNDG, WHEN I LOST MY LIFT AND THE PLANE DROPPED ONTO THE RWY, DESTROYING THE NOSE GEAR AND PROP. MY PAX WERE UNINJURED -- I PULLED THE FUEL OFF, NOTIFIED THE FAA OVER THE CTAF OF WHAT HAD HAPPENED, AND THEN LEFT THE AIRPLANE IN THE MIDDLE OF RWY 23, APPROX 800 FT FROM THE THRESHOLD. CHAIN OF EVENTS: I BELIEVE THE CHAIN OF EVENTS BEGAN TO DEVELOP WHEN I GOT MY FIRST WX BRIEFING AND FAILED TO RECOGNIZE THE LIKELIHOOD OF ENCOUNTERING ICE, PREDICATED UPON THE WX RPTS. I BELIEVED THE WX WAS IMPROVING FROM THE SAT PHOTOS AND RADAR, BUT THAT WAS NOT THE CASE. I COULD HAVE AMENDED MY FLT PLAN WHEN I FIRST ENCOUNTERED ICE, BUT THOUGHT THAT WAS AN ISOLATED OCCURRENCE. THE ICE ITSELF WAS NOT A PROB UNTIL TOUCHDOWN, WHEN MY LACK OF EXPERIENCE IN LNDG WITH ICE ON MY WINGS ALLOWED ME TO NOT FULLY CONSIDER THE EFFECT OF PULLING OFF PWR WHILE SIMULTANEOUSLY RAISING THE NOSE FOR TOUCHDOWN. HAD I LEFT PWR ON FOR MAINTAINING 100 KTS, THERE MAY HAVE BEEN NO PROB WITH LNDG, OTHER THAN IT BEING LONG. HUMAN PERFORMANCE: MY JUDGEMENT ABOUT THE POSSIBILITY OF ICE AND ITS EFFECT UPON MY TOUCHING DOWN AT LNDG WAS POOR. I BELIEVE I CORRECTLY DECIDED TO NOT LOWER FLAPS, TO MAINTAIN A HIGHER THAN NORMAL RATE OF SPD FOR MY DSCNT TO LNDG, BUT INCORRECTLY CALCULATED THE TIMING FOR REDUCING SPD AND RAISING THE NOSE AFTER XING THE ARPT THRESHOLD. I WAS A LITTLE NERVOUS ABOUT THE AMOUNT OF ICE ON MY WINGS, SINCE THERE APPEARED TO BE ABOUT 1-1 1/2 INCHES ON THE STRUT, BUT WHEN MEASURED FOR THICKNESS THE NEXT DAY, WAS ONLY ABOUT 1/2 INCH.

Synopsis :

A C206 PLT STALLED OUT 5-10 FT HIGH ON LNDG DUE TO ICE BUILDUP.

Time

Date : 200103

Day : Wed

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : GSO.Airport

State Reference : NC

Altitude.MSL.Single Value : 21000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.ARTCC : ZDC.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : EMB ER 135 ER&LR

Mission : Passenger

Navigation In Use.Other : FMS or FMC

Flight Phase.Descent : Vacating Altitude

Person / 1

Function.Flight Crew : Captain

Experience.Flight Time.Total : 10000

Experience.Flight Time.Last 90 Days : 50

Experience.Flight Time.Type : 50

ASRS Report : 504440

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Radar

Person / 4

Function.Controller : Radar

Events

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.None Taken : Anomaly Accepted

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Problem Areas : Navigational Facility

Narrative :

INBOUND TO GSO ON THE HENBY 1 ARR, A MAX AUTH ALT IS PUBLISHED AT FL210. A FEW WKS AGO, I INQUIRED ABOUT IT TO CTR BECAUSE IT APPEARED WE WOULD NOT BE ABLE TO COMPLY WITH THE MAX AUTH ALT. THE CTLR ANSWERED IT DID NOT APPLY BECAUSE WE WERE USING GPS NAV. THIS WK, DURING THIS RPTD EVENT, THE EVENT CTLR ASKED THE REASON WE WERE NOT INCREASING THE RATE OF DSCNT IN ORDER TO COMPLY WITH THE MAX AUTH ALT. HE HAD CLRED US TO FL200. WE WERE ALSO USING GPS NAV. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR'S CONCERN WAS DIFFERENT INFO GIVEN BY DIFFERENT CTLRS. ONCE HEARING THE REASON THE RPTR ACCEPTED THE ANSWER. THE RPTR WILL REQUEST RELIEF FROM THE MAX AUTH ALT THE NEXT TIME HE FLIES THE APCH.

Synopsis :

EMB135 CAPT QUESTIONED THE MAX AUTH ALT LISTED ON THE HENBY 1 STAR INTO GSO.

Time

Date : 200103

Day : Sat

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : 5T6.Airport

State Reference : TX

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Ceiling.Single Value : 3000

Aircraft / 1

Operator.General Aviation : Instructional

Make Model : Super Skywagon/Stationair/Turbo Stationair 6

Mission : Training

Flight Phase.Landing : Roll

Aircraft / 2

Make Model : Bonanza 36

Flight Phase.Ground : Taxi

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 2100

Experience.Flight Time.Last 90 Days : 60

Experience.Flight Time.Type : 100

ASRS Report : 504624

Person / 2

Function.Flight Crew : Single Pilot

Person / 3

Function.Observation : Observer

Function.Other Personnel : FBO Personnel

Events

Anomaly.Incursion : Runway

Anomaly.Conflict : Ground Critical

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Took Evasive Action

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

I WAS LNDG ON RWY 16 AT (5T5) WITH THREE CAP CADETS ON BOARD. I HAD TOUCHED DOWN, AFTER MAKING 3 CALLS ON APCH, ONLY TO HAVE A BONANZA ALMOST TAXI ON TO THE ACTIVE RWY TO BACK TAXI FOR TKOF. HE STOPPED WITH HIS PROPELLER APPROX 3 FT FROM THE RWY W EDGE. I HAD MOVED TO E SIDE OF RWY PREPARED TO TAKE THE GRASS. HE INDICATED HE WAS 'MESSING WITH HIS GPS' AND NOT WATCHING. THE TRULY SAD SIT IS THERE IS A PARALLEL TXWY TO TAKE HIM TO 16 WITHOUT HAVING TO BACK TAXI ON THE RWY AND CREATE THIS POTENTIAL HAZARD. I WAS TOO SLOW TO EFFECT A GAR AT TIME HE STARTED ROLLING FORWARD, BUT FEEL I WOULD HAVE BEEN ABLE TO GET OFF THE GRASS TO AVOID COLLISION. SEVERAL WITNESSES INCLUDING THE ARPT MANAGER WITNESSED THIS EVENT. I RETURNED TO THIS ARPT ABOUT AN HOUR LATER AS ANOTHER CAP ACFT HAD UNRELATED MAINT PROBS AND THE WITNESSES, WHO WERE SUPPORTING A CROP DUSTER WERE AGHAST AT WHY OTHER PLT HAD NOT USED TXWY AND HAD ALLOWED HIMSELF TO MOVE TOWARD RWY. I ASKED PLT ON RADIO WHAT HE WAS THINKING ABOUT AND HE ADVISED HE WAS PAYING TOO MUCH ATTENTION TO GPS AND DIDN'T REALIZE HE WAS MOVING. HE NEVER DID EXPLAIN WHY HE DID NOT USE TXWY. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATES THAT HE WAS CONCENTRATING ON THE FLAIR AND DID NOT SEE THE OTHER ACFT UNTIL ON THE ROLL AND TOO SLOW TO GAR. THERE HAD BEEN NO COMMUNICATION FROM THE OTHER ACFT. THE GRASS WAS WET AND SOGGY, BUT A BETTER OPTION THAN HITTING THE BONANZA SO HE WOULD HAVE TAKEN THAT OPTION HAD THE ACFT NOT STOPPED. HE FLIES OVER THIS ARPT FREQUENTLY AND IS AWARE OF THE CONFIGURATION. RPTR ATTENDED A NON-TWR SAFETY SEMINAR RECENTLY AND FELT IT WAS VERY GOOD INFO.

Synopsis :

CESSNA 206 ON LNDG ROLL SIGHTS A BONANZA TAXIING ONTO THE RWY. A UNICOM OPERATOR OBSERVER YELLS STOP AND BONANZA PLT DOES SO A RPTR PREPARES TO TAXI ONTO THE GRASS TO AVOID A COLLISION.

Time

Date : 200103

Day : Mon

Place

Locale Reference.Airport : SEZ.Airport

State Reference : AZ

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.ARTCC : ZAB.ARTCC

Make Model : Any Unknown or Unlisted Aircraft Manufacturer

Mission : Sky Diving

Navigation In Use.Other : GPS

Flight Phase.Climbout : Intermediate Altitude

Flight Phase.Descent : Approach

Route In Use.Departure.SID : LYRIT

Route In Use.Approach : Instrument Non Precision

Person / 1

Function.Oversight : Airport Manager

Experience.Flight Time.Total : 1000

Experience.Flight Time.Last 90 Days : 5

Experience.Flight Time.Type : 500

ASRS Report : 504657

Events

Anomaly.Inflight Encounter : Skydivers

Resolatory Action.None Taken : Unable

Consequence.FAA : Investigated

Supplementary

Problem Areas : Airport

Problem Areas : Chart Or Publication

Problem Areas : FAA

Problem Areas : Flight Crew Human Performance

Narrative :

SKY DIVING OPS HAVE RECENTLY BEGUN AT COTTONWOOD (P52), ARIZONA. THE PLTS FLYING THE DROP PLANE ARE NOT ON THE UNICOM FREQ FOR SEDONA, ARIZONA. THE JUMP ZONE IS NOT MARKED ON THE CHARTS, AND THE JUMP ZONE IS WITHIN THE TRANSITION ROUTES TO THE SEDONA, ARIZONA GPS APCH. THE APCH IS EXTENSIVELY USED BY STUDENTS AND MILITARY AND BUSINESS JET TFC FOR TRAINING. THERE ARE NO NOTAMS OTHER THAN THE LOCAL FSS NOTAM. MUCH OF SEDONA'S TFC IS CROSS COUNTRY AND NEVER GET THE LOCAL NOTAMS. THIS IS AN ACCIDENT WAITING TO HAPPEN! CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR ADVISED THAT THE PARACHUTE JUMPING OPERATOR HAS RECENTLY BEGUN ANNOUNCING ON SEZ UNICOM OF ITS JUMPING ACTIVITY. THE RPTR ADVISED THAT HE WOULD COORD WITH ZAB, COMMERCIAL CHART COMPANY AND FSDO HIS REQUEST TO HAVE FAA/COMMERCIAL PUBLICATIONS DOCUMENT THIS NEW ACTIVITY OUT OF COTTONWOOD (P52) ARPT. PRESCOTT FSS ADVISED THAT A LOCAL NOTAM (#0313) DETAILS PARACHUTE JUMPING OPS, WHICH ARE BASICALLY MONDAY THROUGH SUNDAY, SUNRISE TO SUNSET, WITH THE APPROPRIATE VMC RESTRS.

Synopsis :

A SEZ ARPT OFFICIAL CONCERNED WITH NEW PARACHUTE JUMPING OP BEING CONDUCTED BTWN JUWSO AND EXUTY INTXN'S ON THE SEZ GPS RWY 3 APCH.

Time

Date : 200104

Day : Sat

Local Time Of Day : 1201 To 1800

Place

State Reference : TX

Altitude.MSL.Bound Lower : 15000

Altitude.MSL.Bound Upper : 15500

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : I90.TRACON

Operator.General Aviation : Corporate

Make Model : Learjet 35

Mission : Ambulance

Navigation In Use.Other : GPS

Flight Phase.Climbout : Intermediate Altitude

Route In Use.Departure : On Vectors

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 3800

Experience.Flight Time.Last 90 Days : 150

Experience.Flight Time.Type : 1500

ASRS Report : 507749

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Departure

Events

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Non Adherence : Clearance

Independent Detector.Aircraft Equipment : Altitude Alert

Independent Detector.Other.ControllerA : 3

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Resolatory Action.Controller : Issued Advisory

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

DURING CLB WHILE ON A VECTOR, APCH CLRED US TO THE LEV VOR. COPLT WAS HAVING TROUBLE PROGRAMMING GPS. I LOOKED DOWN TO HELP REMEDY HIS PROB. THIS DISTR ME FROM FLYING ACFT. ALT ALERTER WENT OFF AS WE PASSED 300 FT OFF OUR ALT. AS I CORRECTED FOR THE DEV, THE ALT WENT TO 15500 FT. ATC INFORMED US OF THE DEV AS THE ALERTER WENT OFF. WE PROMPTLY CORRECTED THE DEV. THERE WAS NO REQUEST TO CALL ATC.

Synopsis :

LEARJET 35 CAPT CLBED FROM ASSIGNED INTERMEDIATE CLB ALT DUE TO DISTR IN MONITORING THE FO'S GPS PROGRAMMING. HE NOTICED HIS ERROR AT THE SAME TIME THAT THE CTLR REMINDED THEM OF THEIR ALT ASSIGNMENT.

Time

Date : 200104

Day : Wed

Local Time Of Day : 0601 To 1200

Place

State Reference : FO

Altitude.MSL.Single Value : 15000

Aircraft / 1

Controlling Facilities.ARTCC : SCEZ.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : B767 Undifferentiated or Other Model

Mission : Passenger

Component / 1

Aircraft Component : Position Computing System

Aircraft Reference : X

Component / 2

Aircraft Component : ILS/VOR

Aircraft Reference : X

Component / 3

Aircraft Component : INS / IRS / IRU

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Type : 2505

ASRS Report : 508096

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Flight Crew : Relief Pilot

Person / 4

Function.Controller : Radar

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 3

Resolatory Action.Flight Crew : Became Reoriented

Resolatory Action.Flight Crew : Returned To Intended or Assigned Course

Resolatory Action.Controller : Issued Advisory

Consequence.FAA : Reviewed Incident With Flight Crew

Consequence.Other : Company Review

Supplementary

Problem Areas : Aircraft

Problem Areas : Airport

Problem Areas : Chart Or Publication

Problem Areas : Company

Problem Areas : Flight Crew Human Performance

Problem Areas : Navigational Facility

Narrative :

IT WAS A BEAUTIFUL MORNING IN SCEL. I HAD REVIEWED THE ANDES 4 ARR AND THE CAT IIIA ILS RWY 17 AS WELL AS THE COMMERCIAL CHART IN PREP FOR THE APCH AND LDG. WE STARTED THE BRIEFING BEFORE T/D, BUT COMPLETED IT DURING THE DSCNT. WE KNEW THE POTENTIAL FOR MAP SHIFT EXISTED, BUT DID NOT MENTION IT IN THE BRIEF. WE WERE ALL VERY AWARE OF THE HIGH TERRAIN DESCENDING IN CLEAR SKIES INTO SCEL. I HAD TUNED THE TBN 355 RADIAL, BUT DID NOT REFER TO IT DURING THE DSCNT, USING INSTEAD LNAV ON THE MAP MODE. DESCENDING THROUGH APPROX FL150 THE FO CHKED THE VOR COURSE AND FOUND US TO BE LEFT OF COURSE APPROX 5 NM. AT THE SAME TIME SCEL APCH WANTED TO KNOW WHY ALMOST EVERY 767 WAS OFF COURSE. I CONFIRMED THE DEVIATION AND CORRECTED BACK ON, SUBSEQUENTLY DISREGARDING THE MAP AND COMPLETING THE REST OF THE ARR AND CAT III AUTOLAND WITH NO FURTHER PROBS USING RAW DATA. CAUSING FACTORS: BRIEFING SHOULD BE COMPLETED PRIOR TO DSCNT. RECOMMEND PF TO BE ON RAW DATA DURING THE DSCNT USING THE MAP AS A BACKUP ESPECIALLY IN IMC CONDITIONS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATED THAT THE INFO RELATED TO THE POSSIBILITY OF A MAP SHIFT IS ON A COMPANY CHART. THE PAGE DOES NOT STATED WHERE IT OCCURS. RPTR IS OF THE OPINION THAT IT OCCURS BECAUSE OF THE HIGH SURROUNDING TERRAIN. ONCE THE ACFT APCHS AND PASSES TBN VORTAC THE IRU UPDATES THE MAP POS. THE TERRAIN TO THE E WHEN 40 MILES OUT IS ANYWHERE FROM 15,000 FT TO 20,000 FT HIGH. THE APCH CTLRS ARE VERY GOOD AT MONITORING THE ACFTS PROGRESS. THE 767'S WERE OFF COURSE MORE THAT DAY THAN USUAL. ON THE GND THE RPTR TALKED WITH CREWS OF OTHER U.S. CARRIERS AND THEY ALL NOTED THE MAP SHIFT. HE DOESN'T KNOW IF THEIR COMPANY POLICY REQUIRES MONITORING OF THE RAW DATA AS HIS COMPANY DOES. HE FEELS THAT A NOTE ON THE ARR PAGE, AS WELL AS THE PRESENT NOTE ON ARPT CHART IS WARRANTED REGARDING THE NEED TO MONITOR AND NAVIGATE BY THE RAW DATA BECAUSE OF MAP SHIFTS NORTH OF TBN.

Synopsis :

MAP SHIFT PROB. A B-767-300 FLC NOTES THEY ARE LEFT OF THE 355 DEG RADIAL OF TBN VORTAC WHILE USING THEIR FMS MAP DISPLAY FOR GUIDANCE. SCEL APCH CTLR ISSUES ALERT THAT ALL B-767'S HAVE BEEN OFF COURSE N OF TBN VOR ON ANDES 4 ARR TO SCEL, FO.

Time

Date : 200105

Day : Tue

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : GSO.Airport

State Reference : NC

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : GSO.TRACON

Operator.General Aviation : Instructional

Make Model : King Air C90 E90

Mission : Training

Flight Phase.Climbout : Intermediate Altitude

Flight Phase.Cruise : Level

Route In Use.Departure : On Vectors

Route In Use.Enroute : On Vectors

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Instruction : Instructor

Experience.Flight Time.Total : 11000

Experience.Flight Time.Last 90 Days : 70

Experience.Flight Time.Type : 550

ASRS Report : 510652

Person / 2

Function.Oversight : PIC

Function.Instruction : Trainee

Person / 3

Function.Controller : Departure

Person / 4

Function.Controller : Departure

Events

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Became Reoriented

Resolatory Action.Flight Crew : Returned To Intended or Assigned Course

Resolatory Action.Controller : Issued New Clearance

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Problem Areas : Chart Or Publication

Problem Areas : Flight Crew Human Performance

Problem Areas : Navigational Facility

Narrative :

I WAS OBSERVER INSTRUCTOR PLT WITH A PLT WHO IS TO BE OUR NEW COMPANY SINGLE PLT (PIC) (HE HAS AN ATP AND 12000+ HRS). ON A BUSINESS FLT RETURNING TO PETERSBURG, WV (W99), FROM LEXINGTON, NC (EXX), WE HAD TO PICK UP OUR CLRN ON THE GND AT EXX BY REMOTE. THE CONNECTION WAS BAD AND WE ASKED TO VERIFY IT TWICE. WE WERE CLRED TO AZELL INTXN 4000 FT. JUST BEFORE AZELL WE WERE CLRED TO JEANE INTXN BY GSO CTLR. WE ASKED THE CTLR TO SPELL IT AS WE COULD NOT LOCATE IT ON OUR LOW ALT ENRTE CHARTS. WE WERE STILL AT 4000 FT. I PUT JEANE INTXN INTO OUR GPS (KLN 90B, IFR CERTIFIED) BUT THE DISTANCE WAS TOO GREAT. I HAD THE PIC RECHK THE SPELLING AND THE CTLR SAID HE HAD MISPELLED IT AND GAVE US THE NEW SPELLING WHICH BOTH THE PIC AND I THOUGHT WAS JEANI. WE STILL COULD NOT FIND IT IN OUR ENRTE CHART AND THE GPS SAID IT WAS TOO FAR AWAY FOR OUR RTE. THE CTLRS CHANGED, SAME FREQ, AND THE NEXT CTLR GAVE US A 070 DEG STEER TO A FIX OF 38 MI ON THE 058 DEG RADIAL OF GSO. I REMEMBERED DEPARTING FROM GSO OTHER TIMES AND LOOKED AT A DEP PROC CHART (QUAKER 2) AND JEANY WAS ON THAT CHART. THE REST OF THE FLT WAS UNEVENTFUL. THE FIRST PART OF THE FLT I CONSIDER UNSAFE BECAUSE IT KEPT 2 PLTS (ACFT WAS PUT ON AUTOPLT) HEADS MOSTLY INSIDE THE ACFT. THERE WERE OTHER VFR ACFT IN THE AREA, SOME WITH NO ELECTRICAL SYS, AND BECAUSE OF THE DENSITY OF THE TFC IN THE AREA THAT WAS BEING CTLED AND OUR ALT 4000 FT, WE COULD HAVE HAD A MIDAIR. OUR GPS SYS IS NOT USER FRIENDLY. IF OUR RTE WAS KNOWN BEFORE TKOF, WE COULD HAVE PROGRAMMED IT. IF WE HAD BEEN GIVEN A HIGHER ALT, WE PROBABLY WOULD HAVE BEEN OUT OF SOME SMALLER ACFT AREAS. IF THE APCH PLATES FOR EXX WERE CHANGED OR A DEP ADDED AND THE DEP FIXES FOR GSO ON THE ENRTE CHART ADDED (LOW LEVEL), IT WOULD BE A SAFETY FACTOR. I HAVE ALSO ENCOUNTERED OTHER INSTANCES WHERE THE CTLR HAS GIVEN ROUTING THAT WAS NOT ON THE PROPER ALT ENRTE CHART, IE, MILIE INTXN -- NEAR JAX, BUT AT UPPER LEVELS ABOVE, SAY, 14000 FT MOST PLANES ARE IN COM OR HAVE A XPONDER AND ARE IDENTIFIABLE. AT LOW LEVEL AND BUSY AREAS WITH SINGLE PLT OP, IT IS DANGEROUS. SINGLE PLT OPS ARE BUSY ENOUGH, BUT ADDING LCL FACTORS, WITHOUT BEING LCL, LESSENS THE SAFETY FACTOR.

Synopsis :

A KING AIR FLC IS CONFUSED BY A MISPELLED INTXN NAME THAT WAS NOT AVAILABLE TO THEM IN THEIR GPS WHEN CLRED FROM AZELL TO JEANY INTXN, NC.

Time

Date : 200105

Day : Sat

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : SAN.Airport

State Reference : CA

Altitude.MSL.Bound Lower : 13000

Altitude.MSL.Bound Upper : 4000

Environment

Flight Conditions : IMC

Ceiling.Single Value : 1200

Aircraft / 1

Controlling Facilities.TRACON : SCT.TRACON

Operator.Common Carrier : Air Carrier

Make Model : A321

Mission : Passenger

Flight Phase.Descent : Approach

Route In Use.Arrival : On Vectors

Aircraft / 2

Make Model : Any Unknown or Unlisted Aircraft Manufacturer

Flight Phase.Descent : Approach

Component / 1

Aircraft Component : Autopilot

Aircraft Reference : X

Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 14000

Experience.Flight Time.Last 90 Days : 180

ASRS Report : 1800

Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

Person / 4

Function.Observation : Passenger

Person / 5

Function.Controller : Approach

Events

Anomaly.Altitude Deviation : Overshoot

Anomaly.Conflict : Ground Less Severe

Anomaly.Inflight Encounter : Weather

Anomaly.Non Adherence : Clearance

Anomaly.Other Anomaly : Unstabilized Approach

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Became Reoriented

Resolatory Action.Flight Crew : Executed Go Around

Resolatory Action.Flight Crew : Overrode Automation

Resolutive Action.Controller : Issued New Clearance
Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Airport

Problem Areas : ATC Human Performance

Problem Areas : Chart Or Publication

Problem Areas : Company

Problem Areas : Flight Crew Human Performance

Problem Areas : Weather

Narrative :

WE WERE BEING VECTORED FOR AN APCH BY SAN APCH ATC. WE HAVE BEEN FLYING THE AIRBUS FOR 3 YRS INTO SAN, YET ATC CONTINUES TO TRY TO CLR US FOR THE LOC 27 APCH. ON OUR AIRBUSES, WE CAN ONLY DO ILS OR RNAV APCHS. OUR ACFT HAVE THE EQUIP FOR OTHER NON PRECISION APCHS, BUT OUR HANDBOOK SAYS THAT PROCEDURALLY AND LEGALLY, WE CANNOT DO ANY OTHER TYPES OF APCHS. WE DO NOT EVEN HAVE THE APCH PLATES FOR ANY OTHER APCHS ISSUED TO US, WHICH CAUSES CONSTERNATION AND MORE COMS AT A CRITICAL TIME OF THE APCH. THE WX IN SAN WAS 2 MI IN MIST AND CLOUDS SCATTERED AT 900 FT AND THE CEILING AT 1200 FT WITH LIGHT WINDS FROM THE SW. OUR VISIBILITY REQUIREMENTS FOR THE RNAV 27 ARE 2 1/4 MI AND WITH THE MDA AT 800 FT. WE DECIDED TO CONTINUE THE APCH WITH THE IDEA THAT AROUND 4-5 MI OUT WE WOULD ASK FOR THE CURRENT VISIBILITY AND IF THE TWR VISIBILITY WAS 2 1/4 MI OR ABOVE WE WOULD LAND. PRIOR TO BEING CLRED TO INTERCEPT AND COMMENCE THE APCH, WE WERE ON A LONG VECTOR AND KEPT HIGH BY ATC. OUR FUEL LOAD WAS ADEQUATE FOR 2 APCHS AND A SHORT DIVERSION TO THE ALTERNATE. BUT, WE DID NOT HAVE A LOT OF EXTRA FUEL. FINALLY WE WERE CLRED FOR THE LOC 27 APCH. AFTER A SHORT DISCUSSION, WE WERE RECLRED FOR THE RNAV 27 APCH. WE SELECTED 'APP' FOR THE AUTOPLT RNAV 27. THE AUTOPLT DID NOT CAPTURE THE FINAL APCH COURSE AND NOW WE WERE HIGH. WE STEERED BACK TO THE COURSE, RECONNECTED THE 'APP' FOR THE AUTOPLT RNAV. THE COURSE CAPTURED, BUT WE WERE TOO HIGH TO CAPTURE THE VERT PATH. AS WE ATTEMPTED TO INTERCEPT THE PATH FROM ABOVE, TWR TOLD US TO SLOW DOWN DUE TO TFC AHEAD. HIGH AND TOLD TO SLOW, SOUNDS LIKE THE SCENARIO FOR A GAR. WE SHOULD HAVE GONE AROUND AT THAT TIME, BUT WE CONTINUED. AT ABOUT 1300 FT, TWR TOLD US TO GO AROUND DUE TO AN ACFT ON THE RWY AND TO CLB TO 2500 FT. WE COMMENCED THE GAR, BUT THE AUTOPLT DID NOT CAPTURE THE 2500 FT ALT DUE TO THE EXCESSIVE THRUST. WE FINALLY DISCONNECTED THE AUTOPLT AND STOPPED AT 3600 FT THEN DSNDED TO THE 2500 FT GAR ALT. UNFORTUNATELY, THE EXCESSIVE CLB AND DSCNT RATE CAUSED PAX DISCOMFORT DUE TO HIGH G-LOADS. SINCE THE VISIBILITY FOR RNAV 27 WAS STILL BELOW OUR REQUIREMENTS, WE WERE OFFERED BY ATC THE ILS APCH TO RWY 9. DURING THE VECTORIZING THERE WAS SOME CONSTERNATION AND CONFUSION WITH ATC AND THE TWR AS TO WHETHER WE WERE GOING TO DO THE RNAV OR ILS TO RWY 9. I FOUND OUT LATER THAT THERE WAS A LOT OF CONFUSION BTWN ATC APCH AND THE SAN TWR. HOWEVER, THE EVENTUAL ILS APCH AND LNDG WERE UNEVENTFUL. CONTRIBUTORS TO THE EVENTS: 1) SAN ATC'S LACK OF UNDERSTANDING OF OUR REQUIREMENTS AND CONSTRAINTS FOR THE RNAV APCH. 2) WE WERE INTENT UPON COMMENCING THE APCH AND SHOULD HAVE MADE THE DECISION TO GO AROUND MUCH EARLIER. 3) THE RNAV APCH ALTHOUGH A GPS APCH STILL LACKS VERSATILITY. THE GLIDE PATH SHOULD BE CAPABLE OF INTERCEPT OUTSIDE OF THE FAF JUST AS AN ILS APCH. CURRENTLY, YOU MUST BE AT YOUR FAF ALT TO CAPTURE THE GLIDE PATH, OTHERWISE THE AUTOPLT WILL NEVER CAPTURE. IT IS A MATTER OF COMPUTER PROGRAMMING. MY EXPERIENCE HAS BEEN THAT IN THE 'REAL WORLD' THE VOR OR LOC APCHS ON THE AUTOPLT ARE MORE ACCURATE THAN THE RNAV APCHS. THE RNAV APCHS (GPS) ARE TO BE THE NON PRECISION APCHS OF THE FUTURE. BUT, THE 'CAPTURE' REQUIREMENTS FOR THE RNAV WORK ONLY IF ALL THE ELEMENTS ARE PERFECT AS IN A SIMULATOR SIT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR ADVISED THAT HIS COMPANY HAS IMPLEMENTED A POLICY TO ONLY CONDUCT APCHS THAT HAVE A COMPLETE AND FULLY OPERABLE ILS SYS, PUBLISHED RNAV OR AUGMENTED GPS APCH SEGMENT. THEREFORE, ALL OTHER APCHS, AND THE APPLICABLE APCH PLATES, HAVE BEEN REMOVED FROM THE FLC INVENTORY. THAT IS WHY THE FLC ENTERED INTO A CONVERSATION WITH SCT APCH CTL ABOUT WHICH APCH THEY COULD AND COULD NOT SHOOT. WITHOUT AN APPROPRIATE AND AUTH COMPANY APCH CHART, THEY THEORETICALLY COULD NOT EVEN CONDUCT AN INST APCH. COMPLICATING THIS COMPANY PROC IS THE SOFTWARE BASED AND DRIVEN AIRBUS AUTOFLT SYS. THE RPTR ADVISED THAT IN ORDER TO CONDUCT AN RNAV APCH, THE COMPUTER HAS TO RECOGNIZE THAT THE ACFT IS NOT ABOVE THE GS -- HORIZ COURSE CORRECTIONS CAN BE CONDUCTED ANYWHERE ALONG THE INST RTE OF FLT. THE PLT MUST FLY THE ACFT INTO A POS AT OR BELOW THE GS OR ENTER AN INTXN THAT IS BEHIND THE ACFT AND THAT HAS AN ALT BELOW THE PROJECTED GS. THEN THE ACFT SOFTWARE WILL 'CATCH' THE APCH AND CONTINUE A NORMAL DSCNT. THE RPTR ADVISED THAT COMPANY APPEARS TO BE BEHIND IN NOTIFYING THE FAA OF ITS PROCEDURAL CHANGE. THE RPTR HAS HAD TO CALL THE AIR TFC FACILITIES HIMSELF OCCASIONALLY TO BRIEF THE 'WHAT AND WHY' OF THEIR COMPANY PROCS.

Synopsis :

A321 FLC, TRYING TO CLARIFY THE TYPE OF COMPANY ACCEPTABLE APCH PROC AT SAN, IS ISSUED A GAR DUE TO TFC ON THE RWY AND OVERSHOOTS ASSIGNED ALT.

Time

Date : 200105

Day : Fri

Local Time Of Day : 0601 To 1200

Place

State Reference : CA

Altitude.MSL.Single Value : 10000

Aircraft / 1

Controlling Facilities.TRACON : SCT.TRACON

Operator.Common Carrier : Air Carrier

Make Model : B767 Undifferentiated or Other Model

Mission : Passenger

Flight Phase.Descent : Approach

Component / 1

Aircraft Component : Position Computing System

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 17000

Experience.Flight Time.Last 90 Days : 230

Experience.Flight Time.Type : 2151

ASRS Report : 512585

Person / 2

Function.Flight Crew : First Officer

Person / 4

Function.Controller : Approach

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Override Automation

Resolatory Action.Flight Crew : Returned To Intended or Assigned Course

Consequence.FAA : Reviewed Incident With Flight Crew

Consequence.Other : Company Review

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

AS WE APCHED ARNES INTXN ON THE CIVET ARR, WE HAD A MAP SHIFT OF ABOUT 1/4 MI TO THE R OR N. THE AUTOPLT WAS ON AND IT WAS IN LNAV AND FLT LEVEL CHANGE DSNDING. THE AUTOPLT ROLLED INTO A R TURN TO FOLLOW THE NEW SHIFTED TRACK AS WE DETERMINED IF THE LOC WAS CORRECT OR THE MAP. AS THE LOC WENT 1 DOT R OF COURSE, WE TURNED OFF THE AUTOPLT AND TURNED BACK TO THE CTR OF THE LOC. WE BOTH TURNED TO THE ILS MODE TO COMPLETE THE CIVET WITH LOC AND DME ONLY. AS WE TURNED BACK, ATC SAID THEY SHOWED US TO THE R OF CTR AND ASKED IF WE WERE CORRECTING. WE SAID WE WERE. AS WE APCHED THE FAF, I CHKED THE MAP AND IT HAD CORRECTED BACK TO NORMAL. BUT I THINK IT REMAINED SHIFTED FOR ABOUT 2 MINS. AFTER LNDG, I CALLED THE APCH CTL ON THE TELEPHONE AND HE SAID IT HAD NOT CAUSED ANY CONFLICT. HE DID TELL ME THOUGH THAT ACR HAD A PROB WITH THEIR B757 A WHILE AGO. JUST AS THEY WOULD HIT THE ARNES INTXN, THEIR MAP WOULD SHIFT L AND THE AIRPLANES WOULD START A TURN TO THE L. WE ALSO TOLD A MECH AND PUT THIS INFO IN THE ACFT LOGBOOK.

Synopsis :

A B767 CREW EXPERIENCED A NAV EQUIP DEV WHILE ON A 33 MI FINAL.

Time

Date : 200105

Day : Wed

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : CLT.Airport

State Reference : NC

Altitude.MSL.Single Value : 7000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : CLT.TRACON

Operator.General Aviation : Corporate

Make Model : MU-300 Diamond 1/1a

Mission : Business

Navigation In Use.Other : FMS or FMC

Route In Use.Arrival : On Vectors

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Component / 2

Aircraft Component : FMS/FMC

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 27000

Experience.Flight Time.Last 90 Days : 20

Experience.Flight Time.Type : 650

ASRS Report : 513759

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Maintenance : Technician

Person / 4

Function.Controller : Approach

Events

Anomaly.Maintenance Problem : Improper Maintenance

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.None Taken : Anomaly Accepted

Consequence.Other : Maintenance Action

Factors

Maintenance.Performance Deficiency : Fault Isolation

Maintenance.Performance Deficiency : Repair

Maintenance.Performance Deficiency : Testing

Supplementary

Problem Areas : Aircraft

Problem Areas : Company

Problem Areas : Maintenance Human Performance

Narrative :

PRIMARY NAV SYS FAILED (GPS) FMS FAILED -- SIMULTANEOUS EQUIP FAILURE. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: CREW WAS FLYING A MITSUBISHI MU30 JET. THERE HAS BEEN A LONG HISTORY OF INTERMITTENT NAV PROBS WITH THE ACFT. MAINT CAN NEVER FIND ANYTHING. IN THIS CASE NOTHING WAS REPLACED BECAUSE EVERYTHING WORKED NORMAL FOR MAINT.

Synopsis :

MU30 CREW HAD CHRONIC GPS AND FMC FAILURE IN CLT CLASS B.

Time

Date : 200106

Day : Fri

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : TPH.Airport

State Reference : NV

Altitude.MSL.Single Value : 12500

Environment

Flight Conditions : VMC

Ceiling : CLR

Aircraft / 1

Controlling Facilities.ARTCC : ZLC.ARTCC

Operator.General Aviation : Personal

Make Model : Cessna 195

Mission : Passenger

Navigation In Use.Other : GPS

Flight Phase.Cruise : Level

Aircraft / 2

Controlling Facilities.ARTCC : ZLC.ARTCC

Make Model : Military

Flight Phase.Cruise : Level

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 800

Experience.Flight Time.Last 90 Days : 8

Experience.Flight Time.Type : 200

ASRS Report : 514796

Person / 2

Function.Observation : Passenger

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Airspace Violation : Entry

Anomaly.Non Adherence : FAR

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 3

Resolatory Action.Flight Crew : Diverted To Another Airport

Resolatory Action.Flight Crew : Exited Adverse Environment

Consequence.FAA : Investigated

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

WE WERE FLYING WITH A COUPLED GPS AND A 195 TO ENSURE THAT WE CAME CLOSE BUT DID NOT CROSS THE RESTR BARRIER. HOWEVER, THIS WAS NOT THE CASE AND AT SOME TIME (MY VFR CHK) I NOTICED WE WERE INTO A MIL RESTR AREA. I IMMEDIATELY TOOK ACTION NECESSARY TO GET OUT OF THE RESTR AREA AS QUICKLY AS POSSIBLE. SOME TIME LATER, WE WERE APCHED WITHIN 50 FT BY AN UNIDENTED PLANE AND ASKED TO LAND. WE DID. THIS APCH WAS MADE OUTSIDE OF ANY RESTR AIRSPACE AND CONTACT WAS MADE APPROX 2 MI FROM TONOPAH ARPT.

Synopsis :

A C195 PLT FLIES OFF COURSE DURING GPS NAV AND ENTERS A MIL RESTR AREA. HE IS LATER INTERCEPTED AND ASKED TO LAND, NEAR TPH, NV.

Time

Date : 200106

Day : Mon

Local Time Of Day : 1801 To 2400

Place

Locale Reference.Airport : SFO.Airport

State Reference : CA

Altitude.MSL.Single Value : 1400

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : O90.TRACON

Operator.Common Carrier : Air Carrier

Make Model : B757 Undifferentiated or Other Model

Mission : Passenger

Navigation In Use.Other : FMS or FMC

Flight Phase.Descent : Approach

Component / 1

Aircraft Component : FMS/FMC

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 13800

Experience.Flight Time.Last 90 Days : 210

Experience.Flight Time.Type : 800

ASRS Report : 515775

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Local

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 939

Resolatory Action.None Taken : Detected After The Fact

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

STIN 1 ARR TO SFO PROGRAMMED IN THE FMC. AFTER SFO, GIVEN RADAR VECTOR OF 140 DEGS FOR VISUAL TO RWY 28R. WE REQUESTED THE FMC BRIDGE VISUAL APCH TO RWY 28R. WITH RWY 28R INSIGHT, WE WERE CLRED FOR A VISUAL OR FMS BRIDGE VISUAL TO RWY 28R (OUR CHOICE). LNAV WAS SELECTED AND THE AUTOPLT INTERCEPTED THE BRIDGE VISUAL. AT SAMUL INTXN, THE AUTOPLT STARTED A SLIGHT L TURN TO FLY TO FIOD INTXN AS PROGRAMMED AND I NOTICED A MAP SHIFT TO THE L AND THE ACFT MADE A STEEPER TURN TO THE L AND CROSSED THE RWY 28R CTRLINE. I DISENGAGED THE AUTOPLT AND FLEW THE ACFT BACK TO THE RWY 28R CTRLINE. THERE WAS NO TFC ON APCH TO RWY 28L AND THE TWR DID NOT MAKE ANY COMMENT. THIS IS THE FIRST TIME THAT I HAVE SEEN A MAP SHIFT ON APCH. I HAVE FLOWN THIS FMC APCH 4 OR 5 TIMES WITHOUT A PROB. I LET THE AUTOMATION TAKE THE ACFT TOO FAR AND SHOULD HAVE DISCONNECTED THE AUTOPLT IMMEDIATELY WHEN I SAW THE MAP SHIFT.

Synopsis :

B757-200 CREW ATTEMPTED AN LNAV APCH WHEN MAP SHIFT WAS APPARENT AT SFO.

Time

Date : 200107

Day : Thu

Local Time Of Day : 1201 To 1800

Place

State Reference : FO

Altitude.MSL.Single Value : 41000

Environment

Flight Conditions : Mixed

Aircraft / 1

Operator.General Aviation : Corporate

Make Model : Gulfstream II

Mission : Passenger

Navigation In Use.Other : FMS or FMC

Navigation In Use.Other : INS

Flight Phase.Cruise : Level

Aircraft / 2

Operator.Common Carrier : Air Carrier

Make Model : Commercial Fixed Wing

Flight Phase.Cruise : Level

Component / 1

Aircraft Component : INS / IRS / IRU

Aircraft Reference : X

Component / 2

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 12000

Experience.Flight Time.Last 90 Days : 60

Experience.Flight Time.Type : 3200

ASRS Report : 517548

Person / 2

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 3800

Experience.Flight Time.Last 90 Days : 60

Experience.Flight Time.Type : 200

ASRS Report : 517550

Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Inflight Encounter : Turbulence

Anomaly.Non Adherence : Clearance

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Diverted To Another Airport

Resolatory Action.Controller : Issued New Clearance

Consequence.Other : Maintenance Action

Supplementary

Problem Areas : Aircraft

Problem Areas : Environmental Factor

Problem Areas : Weather

Narrative :

FLT FROM WEWAK, PNG, TO MAJURO, RMI ON JUL/THU/01. RTE OF FLT WAS: AYWK DIRECT WK DIRECT ISMAR DIRECT AGERA DIRECT PALAN DIRECT TOK DIRECT CHG DIRECT BUK B589 DIRECT PKMJ. WE CRUISED AT MACH .80 AT FL410. THE TRIP BEGAN ROUTINELY EXCEPT IT WAS DIFFICULT TO ESTABLISH AND MAINTAIN COMS WITH MADANG AND PORT MORESBY CTRS, ON BOTH VHF AND HF FREQS. ONCE ESTABLISHED ON B589, THE FLT CONTINUED ROUTINELY. PASSING INTO NAURU FIR AT TASAK FIX (S01 26.5-E160 00.0) WE ESTABLISHED COMS WITH ZOA THROUGH COMMERCIAL RADIO. FROM THAT POINT ON WE HAD RELIABLE COMS WITH ATC. SHORTLY AFTER REACHING THE ELNUR FIX (N03 30.0-E166 30.5) AND RPTING POS, BOTH FMS UNITS WENT TO THE DEAD RECKONING MODE AND OUR INS ALSO FAILED. IT IS IMPORTANT TO NOTE THAT ALL 3 LONG RANGE NAV SYS FAILED SIMULTANEOUSLY. AFTER IT FAILED, THE INS INDICATED A POS MORE THAN 300 MI AWAY FROM OUR LAST KNOWN POS BASED ON GPS SENSORS IN BOTH FMS UNITS. WE WERE TOPPING AND CIRCUMNAVING AROUND NUMEROUS TSTMS AT THE TIME. THERE WAS ALSO NO VISUAL CONTACT WITH THE SURFACE. WE SELECTED NAURU NDB/DME, BUT WERE UNABLE TO IDENT THE STATION AND ESTABLISH A RELIABLE POS BASED ON THAT NAVAID. WE WERE ALSO UNABLE TO ESTABLISH ANY COM WITH NAURU RADIO ON ANY PUBLISHED FREQ TO VERIFY NAVAID OP. WE DID HAVE OUR LAST KNOWN POS AND HDG TO REACH MAJURO, AS WELL AS SUFFICIENT FUEL TO REACH MAJURO, AS WELL AS MAJURO'S WX FORECAST, WHICH WAS GOOD. SO WE DECIDED TO HOLD OUR HDG (043 DEGS) TO REACH DEST AT ETA. WE ALSO KNEW WE WOULD BE ABLE TO RECEIVE MAJURO NDB AND DME APPROX 200 MI OUT. WITH THE HELP OF KWAJALEIN RADAR AND WITH OUR PREVIOUS EXPERIENCE AND FAMILIARITY WITH FLYING TO AND FROM MAJURO, WE DECIDED TO CONTINUE ON TO MAJURO. AT THIS POINT WE DESELECTED INERTIAL MODE FROM THE FMS UNITS AND TURNED EACH FMS UNIT OFF, THEN BACK ON. WE DID THIS TWICE, BUT WERE UNABLE TO REGAIN NAV CAPABILITIES. THE WX GOT WORSE AND WE HAD TO DEVIATE AROUND MORE SEVERE STORMS. BUT WE ALWAYS RETURNED TO OUR DEAD RECKONING HDG OF 043 DEGS. GETTING CLOSE TO OUR ETA, WE WERE UNABLE TO NEITHER RECEIVE MAJURO NDB/DME, NOR CONTACT MAJURO RADIO ON 123.6 VHF OR ACR OPS ON 1XX.0 VHF, OUR HANDLER AT ZZZ. HVY WX ALSO PREVENTED US FROM IDENTING MAJURO ATOLL WITH OUR WX RADAR IN GND MAP MODE. WE ALSO TRIED NUMEROUS TIMES TO TUNE IN AND IDENT BUCHOLZ NDB AS WELL AS CONTACT BUCHOLZ RADAR APCH AT KWAJALEIN, BUT TO NO AVAIL. UNABLE TO ESTABLISH COMS WITH ATC, WE ASKED FOR HELP FROM ANY FLT ON THE INTL GUARD FREQ, 121.5 VHF. FORTUNATELY, ACR FLT YYY RESPONDED AND WE EXPLAINED OUR PROB. THEY OFFERED AS MUCH HELP AS THEY POSSIBLY COULD AND NOTIFIED ZOA THROUGH COMMERCIAL RADIO OF OUR PREDICAMENT. IN THE MEANTIME, AFTER CONSIDERING THE LIKELY POSSIBILITY WE HAD ALREADY PASSED MAJURO, WE OPTED TO REVERSE COURSE AND FLY 223 DEGS. WE BEGAN TO TUNE IN ANY AND ALL NDB'S WE COULD FIND PUBLISHED ON THE ENRTE CHART. YYY SUGGESTED TRYING WAKE NDB AS WELL AS WAKE RADIO VHF. IT CAME AS MUSIC TO OUR EARS WHEN WE HEARD THE WAKE ISLAND RADIO OPERATOR TALKING TO BOTH US AND YYY. SOON, WE HAD WAKE NDB AND DME TUNED IN AND DETERMINED OUR POS AS 200 MI S OF WAKE ISLAND. WE TURNED TO FLY DIRECT TO WAKE AND MADE VISUAL CONTACT 80 MI OUT. WE THEN MADE A NORMAL VISUAL APCH AND LANDED, WITH MINIMAL RESERVE FUEL. AFTER SHUTTING DOWN ALL SYS, WE THEN STARTED UP AND REINITIALIZED BOTH THE INERTIAL AND THE FMS'S AND THERE WERE NO FURTHER PROBS. WE WERE BACK TO NORMAL OP ON THE GND AT WAKE ISLAND. OUR FLT PROCEEDED SMOOTHLY FROM THERE TO HNL, HI. AT HNL, A TECHNICIAN FROM A CERTIFIED FAA REPAIR STATION RAMP TESTED OUR #1 AND #2 FMS UNITS, AS WELL AS THE INS UNIT, BUT DID NOT FIND ANY EVIDENCE OF A LIGHTNING STRIKE. ALL SYS CHKED NORMAL. I HAVE NO LOGICAL EXPLANATION AS TO WHAT CAUSED ALL OUR LONG RANGE NAV SYS TO FAIL AT THE SAME TIME, AND WHY WE ENDED UP SO FAR OFF COURSE. BUT WE FEEL STRONGLY THAT WE FLEW INTO AN ELECTROMAGNETIC FIELD, PROBABLY COMING FROM HIGH PWRED DEFENSE RADARS AT KWAJALEIN. THIS MORE THAN LIKELY DISABLED OUR LONG RANGE NAV CAPABILITY, AS WELL AS GAVE US ERRONEOUS HDG INFO. HOW THIS ALL COULD HAVE BEEN PREVENTED WE REALLY CAN'T SAY. BUT WE ADVISE ANYONE USING LONG RANGE NAV EQUIP LIKE OURS TO EXERCISE EXTRA VIGILANCE AS TO POS AWARENESS, AT ALL TIMES. THIS IS ESPECIALLY TRUE IN THE WEST CENTRAL AND SOUTH PACIFIC. THIS MEANS CHKING AND XCHKING POS WITH WHATEVER MEANS AVAILABLE, DME, ADF, AIRBORNE RADAR AND VISUAL CONTACT WHENEVER POSSIBLE. AND NEVER BE RELUCTANT TO ASK FOR HELP. THANKS TO ALL OUR FELLOW AVIATION PROFESSIONALS WHO MONITOR 121.5! CALLBACK INFO FROM RPTR REVEALED THE FOLLOWING INFO: CREW WAS FLYING A GULFSTREAM G2. IT WAS EQUIPPED WITH DUAL GPS SYS AND A SINGLE INS UNIT. THE ACFT WAS NOT EQUIPPED WITH A MOVING MAP. POS INFO THEN IS FED INTO THE DUAL FMC'S WHICH PROVIDE NAV FOR THE ACFT. THE FMC ALSO RECEIVE NAV INFO FROM DUAL DME, VOR-DME AND VOR-VOR IF RECEIVED. IN THIS CASE, THE GPS WAS THE ONLY EXTERNAL NAV SOURCE. THE RPTR STILL DOESN'T UNDERSTAND HOW THEY GOT SO FAR OFF COURSE.

Synopsis :

Time

Date : 200107

Day : Sun

Place

State Reference : FL

Aircraft / 1

Controlling Facilities.ARTCC : ZMA.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : B737-800

Mission : Passenger

Navigation In Use.Other : FMS or FMC

Route In Use.Enroute : On Vectors

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 517709

Person / 2

Function.Flight Crew : First Officer

Person / 4

Function.Other Personnel : Dispatcher

Person / 5

Function.Controller : Radar

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Controller : Issued New Clearance

Resolatory Action.Controller : Provided Flight Assist

Resolatory Action.None Taken : Anomaly Accepted

Consequence.Other : Company Review

Consequence.Other : Maintenance Action

Supplementary

Problem Areas : Aircraft

Problem Areas : Company

Narrative :

LOSS OF GPS. WHEN SYS ANNUNCIATOR PANEL PRESSED THE IRS AND GPS LIGHTS CAME ON INDICATING LOSS OF 1 GPS. THE MEL STATES CREW PLACARDING PERMITTED AND DISPATCH NOTIFICATION REQUIRED. ADDITIONALLY, 1 GPS MAY BE INOP FOR RTES WHERE ACCURACY FOR THE RTE CAN ONLY BE MET BY GPS AND SUPPLEMENTARY MEANS OF NAV REQUIRED. I CONTACTED DISPATCH, USING OPS PERSON AS A RELAY, GIVING DETAILS AND COURSE OF ACTION. AFTER REPEATED COMMENTS, THE OPERATOR SAID DISPATCH UNDERSTOOD AND I WAS CLRED TO GO. IN FACT, THE DISPATCHER THOUGHT I HAD A GPWS PROB. ONCE AIRBORNE, I EXPLAINED THE SIT TO MIAMI ARTCC REQUESTING A315 WITH VOR NAV AS A BACKUP. ORIGINAL RTE REQUIRING BOTH GPS. SIMULTANEOUSLY, THE FO WAS CONTACTING THE DISPATCHER WITH THE SIT. MIAMI ARTCC RECOMMENDED RADAR VECTORS AS A BACKUP WITH A DIRECT TO JUNUR INTXN. DISPATCH SENT A MESSAGE STATING A COM PROB WITH HIGHLIGHTING MEL REQUIREMENTS, AND RECOMMENDING A315 ROUTING AS A BACKUP. I EXPLAINED TO MIA THE RECOMMENDATIONS OF THE DISPATCHER AND ASKED MIAMI WHAT THEY PREFERRED. THEY WANTED RADAR VECTORS PROBABLY FOR FLOW CTL. THE DISPATCHER WAS NOTIFIED OF THE DECISION TO FLY RADAR VECTORS. IN RETROSPECT, I BELIEVE SUPPLEMENTARY NAV SHOULD BE TREATED AS POTENTIAL LOST COM NECESSITATING VORS FOR THE B737-800.

Synopsis :

B737-800 CREW HAD AN INOP GPS IN FOREIGN AIRSPACE.

Time

Date : 200107

Day : Sat

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : CDW.Airport

State Reference : NJ

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft / 1

Operator.General Aviation : Personal

Make Model : Skyhawk 172/Cutlass 172

Mission : Pleasure

Flight Phase.Landing : Roll

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Component / 2

Aircraft Component : Compass (HSI/ETC)

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 436.4

Experience.Flight Time.Last 90 Days : 26.8

Experience.Flight Time.Type : 236.4

ASRS Report : 518329

Person / 2

Function.Controller : Local

Events

Anomaly.Airspace Violation : Entry

Anomaly.Incursion : Landing Without Clearance

Anomaly.Incursion : Runway

Anomaly.Non Adherence : FAR

Independent Detector.Other.Flight CrewA : 1

Resolutive Action.None Taken : Detected After The Fact

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

I TOOK OFF FROM TEB AT APPROX XA40. AS I NEARED THE VICINITY OF LINCOLN PARK, I PUT CDW IN THE GPS TO MAINTAIN MYSELF OUTSIDE CALDWELL AIRSPACE AND CALLED ON THE CTAF AT LINCOLN PARK FOR A TA. THERE WAS CONSIDERABLE STATIC AND CALLS FROM OTHER ARPTS MAKING IT DIFFICULT TO GET ANY INFO. I OVERFLEW THE FIELD AT 1700 FT, IDENTED RWY 1 AS THE ACTIVE, AND MADE A TURN TO THE E TO ENTER A R DOWNWIND FOR RWY 1. MY TURN WAS TOO WIDE EVIDENTLY AND THERE WAS WIND DRIFT THAT BROUGHT ME INTO VIEW OF RWY 4 AT CALDWELL, APCHING FROM THE NE, WHICH I MISTOOK FOR RWY 1 AT LINCOLN PARK. MAKING CALLS ON THE LINCOLN PARK CTAF, I PROCEEDED TO LAND ON RWY 4, ONLY IDENTIFYING MY MISTAKE AS I CROSSED THE NUMBERS. I TAXIED FREE OF THE ACTIVE AND NOTIFIED CALDWELL TWR THAT I HAD ERRONEOUSLY LANDED THINKING THE AIRFIELD WAS LINCOLN PARK, AND REQUESTED TO TAXI TO THE ACTIVE. THE TWR OPERATOR RESPONDED AND TOLD ME TO CONTACT GND FOR TAXI. I TRIED SEVERAL TIMES TO CONTACT GND, WITHOUT SUCCESS. I FOLLOWED ANOTHER PLANE TO THE ACTIVE AND CONTACTED TWR FOR DEP. THE DEP PROCEEDED NORMALLY AND I FLEW TO LINCOLN PARK FOR A SUBSEQUENT LNDG WHERE I INSPECTED A PLANE FOR SALE. I TOOK OFF FROM LINCOLN PARK AT XA45 AND PROCEEDED TO TEB WHERE I LANDED AT XA00. MY MISTAKE WAS BASED LARGELY ON NOT MONITORING MY DISTANCE FROM CALDWELL ON THE GPS AS I MANEUVERED TO LAND, AND BEING UNFAMILIAR WITH EITHER ARPT WHEN APCHING VFR FROM THE ENE. CONTRIBUTING WAS THE FACT THAT FROM THIS APCH RWYS 4R COULD BE MISTAKEN FOR A SHORTER RWY ORIENTED MORE NORTHWARD. I ALSO COULD NOT SEE RWY 27 AT CALDWELL, WHICH WOULD HAVE CAUGHT THE ERROR. ANOTHER CONTRIBUTING FACTOR WAS MY TAKING TOO MUCH TIME MANEUVERING TO FIND THE ARPT AGAIN AFTER FLYING RATHER FAR FROM THE FIELD WHILE CHKING OUT TFC. I THOUGHT I WAS STAYING CLOSER TO LINCOLN PARK THAN I DID. IT WAS MY FIRST TIME TO FLY TO LINCOLN PARK. I DID AT ALL TIMES MAINTAIN THE PROPER PROCS FOR THE ARPT I THOUGHT I HAD, CAREFULLY WATCHING FOR ACFT IN THE PATTERN. NONETHELESS, I FEEL VERY STUPID ABOUT THIS MISTAKE. I HAVE LEARNED AN IMPORTANT LESSON ABOUT ARPT RECOGNITION.

Synopsis :

A LOW TIME PVT PLT PERFORMS AN UNAUTH UNCOORD LNDG AT THE WRONG ARPT WHEN LNDG AT CDW, NJ.

Time

Date : 200107

Day : Fri

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : OAK.Airport

State Reference : CA

Altitude.MSL.Bound Lower : 800

Altitude.MSL.Bound Upper : 3200

Environment

Flight Conditions : IMC

Ceiling.Single Value : 900

Aircraft / 1

Controlling Facilities.TRACON : O90.TRACON

Controlling Facilities.Tower : OAK.Tower

Operator.General Aviation : Instructional

Make Model : Skyhawk 172/Cutlass 172

Mission : Training

Navigation In Use.Other : GPS

Flight Phase.Descent : Approach

Route In Use.Approach : Instrument Non Precision

Component / 1

Aircraft Component : MCP

Aircraft Reference : X

Person / 1

Function.Instruction : Instructor

Experience.Flight Time.Total : 4000

Experience.Flight Time.Last 90 Days : 100

Experience.Flight Time.Type : 500

ASRS Report : 518755

Person / 2

Function.Instruction : Trainee

Person / 3

Function.Controller : Local

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Altitude Deviation : Undershoot

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Published Procedure

Resolutory Action.None Taken : Anomaly Accepted

Resolutory Action.None Taken : Detected After The Fact

Supplementary

Problem Areas : Airport

Problem Areas : ATC Human Performance

Problem Areas : Environmental Factor

Problem Areas : Flight Crew Human Performance

Narrative :

WHILE ON A TRAINING FLT TO OAK, WE FLEW A 'MODIFIED' GPS APCH TO RWY 27L AT OAK INSTEAD OF THE ILS RWY 27R, SIDESTEP RWY 27L AS WE WERE CLRED FOR. THE REASON FOR THIS WAS THAT WE (THE STUDENT AND I) FORGOT TO SELECT 'NAV' ON THE #1 OBS INSTEAD OF 'GPS.' WE HAD ENTERED THE GPS 27L APCH IN THE GPS (KING KLN89B) BUT HAD PLANNED TO USE VOR/ILS NAV THROUGHOUT THIS LEG OF THE FLT. HOWEVER, ATC CLRED US DIRECT TO SABLO INTXN AT ONE POINT, SO WE ENTERED IT INTO THE GPS AND SELECTED 'GPS' FOR THE #1 OBS. LATER WE RECEIVED VECTORS FOR THE ILS. I SET THE GPS ON THE MISSED APCH POINT AND THE STUDENT SELECTED 276 DEGS ON THE OBS. BOTH OF US THINKING THE ILS WAS SELECTED, IT WAS IN THE #1 NAV RADIO AND WE IDENTED IT, BUT FORGOT TO SELECT 'NAV' ON THE OBS. WHEN WE RECEIVED OUR FINAL VECTOR FOR THE ILS, THE NEEDLE (CDI) STARTED COMING IN WHEN EXPECTED, ALBEIT A LITTLE SLOW. WE DIDN'T RECEIVE THE GS, WHICH SHOULD HAVE CLUED ME IN, BUT SINCE RWY 27R WAS CLOSED AND WE WERE TO SIDESTEP ANYWAY, I TOLD THE STUDENT TO DO THE LOC ONLY APCH USING DME. WHEN WE BROKE OUT AT ABOUT 900 FT MSL, WE WERE LINED UP FOR RWY 27L. THAT IS WHEN I NOTICED THE 'GPS' SELECTED. AFTER SWITCHING IT SHOWED US ALMOST FULL SCALE L OF COURSE AND BELOW GS. AN UNEVENTFUL LNDG WAS MADE. ALTHOUGH WE WERE ON THE GPS COURSE, IT WAS STILL IN 'ARM' MODE, NOT 'ACTIVE' SO OUR SENSITIVITY WAS NOT GOOD ENOUGH FOR THE GPS APCH (HENCE MY USE OF 'MODIFIED' EARLIER). FACTORS INVOLVED: I HAVE BEEN CONDUCTING AND TEACHING GPS APCHS FOR ABOUT 3-4 YRS AND I VERIFY THE GPS BUTTON IS SELECTED. HOWEVER, WHEN NOT FLYING A GPS APCH, I HAVE NOT TAUGHT STUDENTS TO VERIFY 'NAV' IS SELECTED. THAT WILL CHANGE NOW. THE SLOW INTERCEPT AND LACK OF GS SHOULD HAVE ALERTED ME TO SOMETHING BEING AMISS. A RECENT FLT TO 2 OTHER ARPTS HAD NAVAIDS QUIT ON US, SO I ASSUMED THE GS OUT INDICATION WAS THE NAVAID PROB TOO QUICKLY -- NOT THE PLT PROB. CORRECTIVE ACTION: FUTURE APCHS USING A NON DEDICATED OBS WILL BE CONFIRMED IN THE PROPER 'NAV' OR 'GPS' MODE TO COINCIDE WITH THE APCH BEING FLOWN.

Synopsis :

A CFI AND HIS STUDENT FLY AN INCORRECT APCH INTO RWY 27L AT OAK, CA.

Time

Date : 200108

Day : Tue

Local Time Of Day : 0601 To 1200

Place

State Reference : MT

Altitude.MSL.Bound Lower : 6900

Altitude.MSL.Bound Upper : 7500

Environment

Flight Conditions : VMC

Ceiling.Single Value : 15000

Aircraft / 1

Controlling Facilities.TRACON : S56.TRACON

Operator.Common Carrier : Air Carrier

Make Model : B767 Undifferentiated or Other Model

Mission : Passenger

Flight Phase.Descent : Approach

Route In Use.Approach : Instrument Precision

Component / 1

Aircraft Component : Flight Dynamics Navigation and Safety

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 16500

Experience.Flight Time.Last 90 Days : 165

Experience.Flight Time.Type : 2750

ASRS Report : 520956

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Approach

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Altitude Deviation : Crossing Restriction Not Met

Anomaly.Altitude Deviation : Overshoot

Anomaly.Non Adherence : Clearance

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.None Taken : Detected After The Fact

Consequence.FAA : Reviewed Incident With Flight Crew

Consequence.Other : Maintenance Action

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

ON VECTORS FOR A VISUAL APCH TO RWY 16L (RWY THRESHOLD DISPLACEMENT OF 1920 FT) MEN AND EQUIP WORKING ON CLOSED PORTION, 10000+ FT AVAILABLE FOR LNDG, A 'VERY' DIM OR WEAK PLASI ON THE L SIDE OF THE RWY. GS INOP. EXCELLENT CEILING AND VISIBILITY, WE CALLED RWY IN SIGHT AT APPROX IRRON. WHILE ON VECTORS FOR A VISUAL APCH THE CTLR CLRED US TO 8000 FT AND FURTHER CLRED US VISUAL APCH UPON PASSING 9000 FT. LINED UP ON FINAL (LOC CAPTURED). THE APCH CTLR CAME BACK AND CLRED US VISUAL APCH RWY 16L TO CROSS LGOON AT OR ABOVE 7500 FT. I SET 7500 FT IN THE ALT WINDOW. AT LGOON (VIA THE EFIS MAP) RESET THE ALT WINDOW TO THE MINIMUM ALT (10000 FT) AND SET THE VERT SPD TO 700/800 FPM. CONTINUED CONFIGURING THE FLAPS. UPON LOOKING OUTSIDE (RWY -- WEAK PLASI) WE APPEARED TO BE LOW. NO GS AVAILABLE (DISPLACED THRESHOLD). CHKD OUR ALT AT 6900 FT AND THE MAP POS JUST PASSING LGOON (I BELIEVE WE HAD A MAP SHIFT -- +/-3 MI). QUESTIONING WHAT WAS GOING, I VERIFIED OUR POS VIA LOC DME. WE WERE JUST PASSING LGOON (12.3 LOC DME). THE CTLR CALLED AND ASKED WHAT ALT WE HAD UNDERSTOOD TO CROSS LGOON (7500 FT OR ABOVE). I EXPLAINED THAT WE UNDERSTOOD THAT WE WERE TO CROSS LGOON AT OR ABOVE 7500 FT AND FURTHER EXPLAINED THAT WE HAD HAD A MAP SHIFT. HE EXPLAINED THE IMPORTANCE OF THE XING ALT (7500 FT) AND CAUTIONED ABOUT THE ALT FOR FUTURE VISUAL APCH TO RWY 16L. WE APOLOGIZED AND THANKED THE CTLR, WENT TO TWR FOR OUR LNDG CLRNC. I BELIEVE THAT THIS SIT COULD HAVE BEEN PREVENTED IF WE HAD VERIFIED (XCHKED) WHAT WE HAD THOUGHT TO BE LGOON (MAP POS) WITH RAW DATA (LOC DME). IT WOULD HAVE SHOWN THE ERROR (DISCREPANCY -- MAP SHIFT). IT WAS A BUSY COCKPIT BUT THAT WOULD HAVE IDENTED THE MAP SHIFT AND WE COULD HAVE WORKED IT OUT FROM THERE. IT'S NEVER TOO BUSY TO XCHK RAW DATA. IT HAS ALSO MADE ME THINK TWICE ABOUT EFIS GENERATED NAV DATA. VERIFY, EVEN IN VERY VFR CONDITIONS.

Synopsis :

A B767 CREW MAKING A VISUAL APCH TO SLC DSNDED BELOW XING RESTR.

Time

Date : 200108

Day : Mon

Local Time Of Day : 0601 To 1200

Place

State Reference : CO

Altitude.MSL.Single Value : 14000

Environment

Flight Conditions : IMC

Aircraft / 1

Controlling Facilities.ARTCC : ZDV.ARTCC

Operator.General Aviation : Corporate

Make Model : Medium Transport, Low Wing, 2 Turbojet Eng

Mission : Passenger

Flight Phase.Climbout : Intermediate Altitude

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 5000

Experience.Flight Time.Last 90 Days : 50

Experience.Flight Time.Type : 1000

ASRS Report : 521557

Person / 2

Function.Controller : Approach

Person / 3

Function.Controller : Radar

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Non Adherence : Clearance

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Controller : Issued New Clearance

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Problem Areas : Weather

Narrative :

THE ACFT HAD THE NAV/COM REPLACED WITH THE GARMEN GNS430. THE NEW AUTOMATION INDUCED A CHAIN OF EVENTS THAT LED TO POSSIBLE AIRSPACE COMPROMISE. THE CLRNC WAS FROM GJT TO 1V5 VIA THE GJT 3 DEP DIRECT TO DBL, THEN AS FILED (DIRECT BJC, THEN DIRECT 1V5), MAINTAIN 14000 FT AND EXPECT FL230 IN 10 MINS. THERE WAS SOME CONFUSION WITH THE DEP PROC BECAUSE THE BOOKLET FELL TO THE FLOOR ON TKOF, BUT THE ISSUE SOON RESOLVED ITSELF WITH ALT. WHILE I WAS CLBING TO 14000 FT AND IN CLOUD (APCH HANDED ME OFF TO CTR) I XMITTED, BUT HAD NO ACKNOWLEDGEMENT. I TRIED TO RECONTACT APCH, BUT INSTEAD CYCLED NAV DIGITS AND LOST NAV INDICATIONS. CTR MAY OR MAY NOT HAVE ISSUED FURTHER CLB CLRNC. I LEVELED BRIEFLY AT 14000 FT, BUT REALIZED I WAS NOT ESTABLISHED ON THE AIRWAY AND WAS HEADED INTO AREAS OF 14000 FT MOUNTAINS WITHOUT NAV INDICATION. I ELECTED TO CONTINUE THE CLB. IN A FEW MINS, I CONTACTED (WEAK AND GARBLED) CTR (THEY REVISED CLRNC LIMIT TO FL210) AND RE-ESTABLISHED NAV. LATER, I WAS CLRED DIRECTLY TO 1V5. I TRIED TO ENTER THE DEST INTO THE GNS430, BUT EACH TIME CHARACTERS DISAPPEARED WHENEVER I TRIED TO ENTER DEST. I DISCOVERED AFTERWARD THAT THIS SYS USES THE 'D>' KEY TO INITIATE THE DIRECT TO DEST ENTRY SEQUENCE, WHILE OTHER SYS USE THE 'D>' KEY TO TERMINATE THAT SEQUENCE! THESE DETAILS ARE UNIMPORTANT EXCEPT TO ILLUSTRATE THAT POOR AND INCONSISTENT AUTOMATION DESIGN CAN RESULT IN COCKPIT PANDEMONIUM. WHAT IS IMPORTANT IS THAT NO AUTOMATION SHOULD BE CERTIFICATED INTO A FLT COCKPIT UNLESS BASIC FUNCTIONALITY IS CONTINUOUSLY ASSURED. THAT WAY, A PLT'S INSTRUCTION BOOK IS NOT A REQUIRED COMPONENT OF THE AUTOMATION.

Synopsis :

A SMT PLT UNFAMILIAR WITH HIS ACFT'S NAV SYS DEVIATED FROM HIS ATC CLRNC.

Time

Date : 200108

Day : Sun

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : IXD.Airport

State Reference : MO

Altitude.MSL.Single Value : 9000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : MCI.TRACON

Operator.General Aviation : Personal

Make Model : MU-300 Diamond 1/1a

Mission : Pleasure

Navigation In Use.Other : GPS

Flight Phase.Climbout : Intermediate Altitude

Route In Use.Departure : VFR

Component / 1

Aircraft Component : Electrical Power

Aircraft Reference : X

Component / 2

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Component / 3

Aircraft Component : ILS/VOR

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 5800

Experience.Flight Time.Last 90 Days : 100

Experience.Flight Time.Type : 1000

ASRS Report : 522771

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Departure

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Airspace Violation : Entry

Anomaly.Non Adherence : FAR

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Exited Penetrated Airspace

Resolatory Action.Controller : Issued Advisory

Supplementary

Problem Areas : Aircraft

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Narrative :

AT APPROX XA20 CDT, I WAS OCCUPYING THE RIGHT SEAT WHILE ACTING AS PIC IN AN MU-300 ON CLIMB OUT FROM IXD, OLATHE, KS. WE DEPARTED VFR AND BEGAN A RIGHT TURN TO AVOID CLASS B AIRSPACE SURROUNDING KANSAS CITY WHEN WE LOST OUR NAV AIDS (BOTH VORS AND GPS) DUE TO WHAT WE NOW BELIEVE WAS AN ELECTRICAL PWR INTERRUPTION. WE CONTACTED KANSAS CITY DEPARTURE CTL AND WERE TOLD TO AVOID CLASS B AIRSPACE WHICH WE ATTEMPTED TO DO USING VISUAL REFERENCE SAID THE KANSAS CITY , MO, AREA CHART. UPON LOSING OUR NAV AIDS, WE TURNED TO A HEADING OF 180 DEGS TO ENSURE WE WOULD NOT ENTER CLASS B AIRSPACE, BUT DUE TO THE CONFUSION SURROUNDING THE SUDDEN LOSS OF NAVIGATIONAL EQUIP, WE MAY HAVE DELAYED THE TURN ENOUGH TO HAVE INADVERTENTLY TOUCHED THE CLASS B BOUNDARY. USING VISUAL REFERENCES AND THE AREA CHART, WE DO NOT BELIEVE WE ENTERED CLASS B AIRSPACE; HOWEVER, IN THE MOMENTARY CONFUSION OF THE EVENTS, IT IS POSSIBLE WE MAY HAVE ENTERED IT BRIEFLY. THE LESSON HERE IS TO HAVE A PRE-DEP PLAN AND ANTICIPATE THE UNEXPECTED. WHILE I, THE PNF, HAD THE AREA CHART OUT AND WAS REFERENCING IT, NORMAL DEP DUTIES, COMBINED WITH A SUDDEN UNEXPECTED EVENT, COMBINED TO PRODUCE ENOUGH CONFUSION SO AS TO CAUSE DELAYED PLT ACTION WHICH RESULTED IN US DEVIATION FROM OUR PRE-DEP PLAN. THE OLD ADAGE APPLIES - FLY THE ACFT FIRST, TAKE CARE OF THE PROBLEM SECOND.

Synopsis :

A MU-300 ACFT LOSES ELECTRICAL PWR, INTERRUPTING THE VOR AND GPS NAV SYSTEM WHICH CREATED A TEMPORARY CLASS B AIRSPACE INCURSION AT MCI, MO.

Time

Date : 200108

Day : Sat

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : SUW.Airport

State Reference : WI

Altitude.MSL.Single Value : 5000

Environment

Flight Conditions : IMC

Ceiling.Single Value : 400

Aircraft / 1

Controlling Facilities.TRACON : DLH.TRACON

Operator.General Aviation : Personal

Make Model : Cardinal 177/177rg

Mission : Pleasure

Navigation In Use.Other : GPS

Flight Phase.Cruise : Level

Route In Use.Enroute : On Vectors

Component / 1

Aircraft Component : Cylinder Head

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 180

Experience.Flight Time.Last 90 Days : 21

Experience.Flight Time.Type : 15

ASRS Report : 522983

Person / 2

Function.Observation : Passenger

Person / 3

Function.Controller : Approach

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Inflight Encounter : Weather

Anomaly.Non Adherence : Published Procedure

Anomaly.Other Anomaly : Unstabilized Approach

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Declared Emergency

Resolatory Action.Flight Crew : Diverted To Another Airport

Resolatory Action.Flight Crew : Landed In Emergency Condition

Resolatory Action.Controller : Provided Flight Assist

Consequence.Other : Flight Cancelled

Consequence.Other : Maintenance Action

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Problem Areas : Weather

Narrative :

ANOTHER PLT AND I HAD AN EMER IN A CESSNA 177RG. WE LOST ALL OIL PRESSURE AS WE WERE STARTING TO RETURN FROM DLH AFTER REALIZING THAT WE WOULD NOT BE ABLE TO GET IN (100 AND 1/4). WE WERE ABLE TO GET IT INTO SUPERIOR, WI ON THE GPS APCH. THE MECHANIC AT THAT ARPT BELIEVES WE BLEW A GASKET. THERE WAS APPROX 2 QUARTS OF OIL IN THE ENGINE AFTER WE LANDED. FULL DETAILS: WE WERE HOLDING OVER THE OM FOR THE ILS 27 INTO DULUTH. EVEN THOUGH THE OIL TEMP HAD RUN HOT THE ENTIRE TRIP (WE HAVE BEEN HAVING A PROB WITH THE OIL TEMP RUNNING AT THE HIGH END OF THE GREEN), IT WAS NOW IN THE MIDDLE OF THE GREEN. AFTER ABOUT 20 MINS OF HOLDING, WE DECIDED THAT IT WAS NOT OUR DAY TO GET INTO DULUTH, AND DECIDED TO TURN FOR HOME. LESSON ONE: INCLUDE ENGINE INSTRUMENTS IN YOUR SCAN: WHEN I CHECKED THE OIL PRESSURE, IT WAS READING 0, PEGGED AT THE FAR LEFT SIDE. I SAT THERE DUMBFOUNDED FOR A FEW SECONDS, NOT BELIEVING THAT I HAD AN ISSUE. AFTER ALL, THE ENGINE WAS STILL RUNNING WELL, WITH NO SIGN OF AN IMPENDING FAILURE. WHILE I KNOW THAT I CHECK THE ENGINE INSTRUMENTS SEVERAL TIMES ON EVERY FLT, I CAN NOT SAY FOR SURE WHETHER THEY ARE ACTUALLY PART OF MY SCAN. LESSON TWO: CONFESS: I LET APCH KNOW THAT I HAD LOST OIL PRESSURE AND DECLARED AN EMR. THEY IMMEDIATELY GAVE ME VECTORS TO SUPERIOR (CLOSEST ARPT) AND STARTED SCRAMBLING TO CHECK WEATHER AT ALL OF THE NEAREST ARPTS. SUPERIOR WAS NOT AT 400. WE COULD MAKE OUT THE GND BELOW US BETWEEN THE BROKEN CLOUDS, BUT NEVER SAW THE ARPT. THEY ALLOWED US TO TALK A FEW THINGS THROUGH WITH MY INSTRUCTOR OVER APCH FREQ. LESSON THREE: THE GARMIN 430 POSSIBLY SAVES OUR LIVES: THE SITUATIONAL AWARENESS PROVIDED BY THE GARMINS HELPED US GET THE PLANE ON THE GND. MY INSTRUMENT RATED PAX IMMEDIATELY WENT TO WORK SETTING UP THE GPS FOR A GPS 31 APCH INTO SUW. IT REALLY HELPED HAVING AN INSTRUMENT RATED PLT IN THE RIGHT SEAT. WE FLEW AN EXTREMELY HIGH APCH AND BASICALLY DESCENDED PWR OFF, RIGHT INTO THE FIELD. THE ENGINE WAS STILL THERE IF I NEEDED IT. WITHOUT THE GARMIN, WE WOULD HAVE HAD TO SHOOT AN NDB APCH TO BELOW MINIMUMS (1000 AND 1). WITH THE GPS WE WERE LEGAL TO 400 FT. WE BROKE OUT AND HAD THE FIELD ABOVE 600. WE DID NOT FLY THE COMPLETE APCH. UNDER PIC EMER AUTHORITY, WE USED THE MOVING MAP TO TURN FINAL INSIDE THE INITIAL APCH FIX. WE WOULD NOT HAVE BEEN ABLE TO DO THAT NEARLY AS EASILY WITH CONVENTIONAL INSTRUMENTS. LESSON FOUR: FLY THE PLANE: WE HAD ENOUGH TROUBLE WITH 2 INSTRUMENT RATED PLTS ON BOARD. I WAS CONCERNED WITH BEST GLIDE AND FLYING THE AIRPLANE. OTHER PLT, PAX HANDLED SETTING UP THE GARMIN. I NOW UNDERSTAND HOW EASY IT IS TO BE OVERLY DISTRACTED IN THIS SIT. I DELIBERATELY LEFT THE GEAR UP TO DECREASE DRAG. WHEN THE GEAR WARNING HORN WAS GOING OFF DURING DESCENT, I THOUGHT IT WAS AN OM AND IGNORED IT. PAX REMINDED ME TO PUT THE GEAR DOWN. WE BROKE OUT AND STAYED HIGH UNTIL WE HAD THE RWY IN SIGHT, DROPPED FLAPS AND FLEW A PWR OFF APCH.

Synopsis :

A LOW TIME C177RG PVT PLT LOSES ENG OIL PRSSURE AND QUANTITY, DIVERTS AND MAKES AN EMER GPS APCH TO SUW, WI.

Time

Date : 200111

Day : Sun

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 6500

Aircraft / 1

Controlling Facilities.TRACON : ZZZ.TRACON

Operator.General Aviation : Personal

Make Model : Cheetah Tiger Traveler

Mission : Pleasure

Flight Phase.Cruise : Level

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 13200

Experience.Flight Time.Last 90 Days : 550

ASRS Report : 529571

Person / 2

Function.Controller : Approach

Events

Anomaly.Airspace Violation : Entry

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 2

Resolutory Action.None Taken : Detected After The Fact

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Airspace Structure

Problem Areas : FAA

Problem Areas : Flight Crew Human Performance

Narrative :

ON 11/SUN/01, RETURNING VFR FROM YYY TO XXX ENROUTE VIA ZZZ AREA. INADVERTENTLY ENCROACH ON TEMPORARY RESTR AREA NEAR ZZZ. ON 11/FRI/01 ENROUTE FROM XXX TO YYY I WAS ABLE TO BYPASS SUCCESSFULLY THIS AREA. ON RETURN. 11/SUN/01 I FELT WITH GPS THAT I HAD BYPASSED ZZZ BY FLYING N AROUND AREA. I CONTACTED ZZZ APCH AND WAS TOLD I WAS 18 MI NW OF ZZZ WHEN GIVEN A SQUAWK NUMBER. I DID NOT INTENTIONALLY ENCROACH INTO THIS AIRSPACE.

Synopsis :

AN AA5 PLT VIOLATED A TFR INVOLVING A PWR PLANT.

Time

Date : 200111

Day : Sat

Place

Locale Reference.Airport : HDH.Airport

State Reference : HI

Altitude.MSL.Single Value : 13500

Environment

Flight Conditions : VMC

Aircraft / 1

Make Model : King Air 100 A/B

Mission : Sky Diving

Flight Phase.Cruise : Level

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 3500

Experience.Flight Time.Last 90 Days : 85

Experience.Flight Time.Type : 600

ASRS Report : 529742

Events

Anomaly.Airspace Violation : Entry

Anomaly.Non Adherence : FAR

Independent Detector.Other.ControllerA : 2

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Exited Penetrated Airspace

Resolatory Action.None Taken : Detected After The Fact

Consequence.FAA : Reviewed Incident With Flight Crew

Consequence.Other : Maintenance Action

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

OUR DROP ZONE LIES ADJACENT TO A RESTR AREA. ON THE FINAL JUMP RUN LEG, WE HAVE TO FLY PARALLEL TO THE RESTR AREA. NORMALLY, WE CAN SEE GND LANDMARKS THAT PROVIDE A GOOD INDICATION OF OUR GND TRACK AND PROX TO THE RESTR AREA'S BORDER. TODAY, HOWEVER, THERE WERE CLOUDS THAT, WHILE CLR OVER AND UPWIND OF THE DROP ZONE, LAY BELOW US FOR A FEW MI ON THE FINAL LEG. TO HELP US REMAIN CLR OF THE RESTR AREA ON DAYS LIKE THIS, WE USE A HANDHELD GPS WITH AN ANTENNA THAT'S ATTACHED TO THE WINDOW. WHICH NAVING, UNBEKNOWNST TO ME, THE ANTENNA FELL OFF THE WINDOW. THE GPS BECAME INACCURATE AND I INADVERTENTLY DRIFTED INTO THE RESTR AREA. ONCE CLR OF THE CLOUD LAYER, I REALIZED MY MISTAKE AND IMMEDIATELY CORRECTED. I WAS IN THE RESTR AREA FOR ABOUT 3 MINS. I LATER CALLED CERAP AND EXPLAINED MY SIT. THE GPS ANTENNA HAS SINCE BEEN ATTACHED MORE PERMANENTLY TO AVOID SIMILAR PROBS.

Synopsis :

BEECH 100 KING AIR PLT INADVERTENTLY ENTERED RESTR AIRSPACE DUE TO LOSING THE HANDHELD GPS ANTENNA OFF THE COCKPIT WINDOW RESULTING IN NOT AN ACCURATE FIX OVER THE GND.

Time

Date : 200111

Day : Sun

Local Time Of Day : 1801 To 2400

Place

State Reference : CA

Altitude.MSL.Bound Lower : 6300

Altitude.MSL.Bound Upper : 10000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : SCT.TRACON

Operator.Common Carrier : Air Carrier

Make Model : B767-300

Mission : Passenger

Navigation In Use.Other : FMS or FMC

Flight Phase.Descent : Intermediate Altitude

Component / 1

Aircraft Component : FMS/FMC

Aircraft Reference : X

Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 6740

Experience.Flight Time.Last 90 Days : 100

Experience.Flight Time.Type : 272

ASRS Report : 530562

Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

Person / 3

Function.Controller : Approach

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Altitude Deviation : Overshoot

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 3

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolutive Action.Flight Crew : Returned To Assigned Altitude

Resolutive Action.Flight Crew : Returned To Intended or Assigned Course

Resolutive Action.Controller : Issued Alert

Resolutive Action.None Taken : Detected After The Fact

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

THE CAPT BRIEFED THE PDZ 4 ARR USING A VNAV DSCNT TO THE RWY 25L ILS. THE ALTS IN THE FMS AT EACH WAYPOINT WERE VERIFIED AND VNAV AND LNAV WERE ENGAGED. LAX AND SLI VOR WERE SELECTED IN THE CAPT'S FMC AS BRIEFED TO PREVENT MAP SHIFT. WE WERE CLRED FOR THE ARR AND 8000 FT WAS SET IN THE ALT WINDOW. SOMEWHERE IN THE VICINITY OF TEJAY THE CAPT CALLED FOR THE NO SMOKING LIGHT TO BE CYCLED. AFTER CYCLING THE LIGHT AND COMPLETING THE CHKLST I WAS LOOKING FOR SOME INFO IN MY CHARTS, I DON'T REMEMBER HOW LONG OR WHAT I WAS LOOKING FOR THERE. DURING THIS TIME I REMEMBER THE CAPT SAYING SOMETHING ABOUT A MAP SHIFT AND BEING 800 FT HIGH AND THEN 200 FT LOW ON THE DSCNT PROFILE. AS I LOOKED BACK TO THE INSTS I FIRST NOTICED AND STATED TO THE CAPT THAT WE WERE AT 300 KIAS AND BELOW 10000 FT. I LOOKED BACK TO CHK THE ARR PLATE ALT AND ALTHOUGH I DON'T REMEMBER LOOKING AT THE HSI, I MUST HAVE, BECAUSE I NEXT SAID, WE NEED TO CLB, WE NEED TO BE AT 10000 FT, AT ARNES. THE CAPT BEGAN A PULL UP AND WE BOTTOMED OUT AT 6300 FT. THE CAPT SAID TO CONTACT APCH, BUT APCH CAME UP RIGHT THEN AND ASKED US TO VERIFY OUR ALT. I RESPONDED 6300 FT AND CLBING BACK UP TO 10000 FT AND THAT WE THOUGHT WE MIGHT HAVE HAD A MAP SHIFT AND ASKED IF HE COULD VERIFY OUR POS. HE REPLIED THAT WE WERE RIGHT OVER ARNES AND TO MAINTAIN PRESENT ALT AND THAT WE WERE CLRED FOR THE RWY 25L ILS APCH. AT THAT TIME THE HSI SHOWED US OVER ARNES AS WELL. I BELIEVE WE WERE SET UP PROPERLY FOR THE APCH. WHY THE ACFT DSNDED THROUGH A 10000 FT RESTR AT ARNES AND THROUGH THE MCP ALT OF 8000 FT I CANNOT EXPLAIN. MORE IMPORTANTLY IS WHY WE DIDN'T CATCH THE DEV SOONER? POSSIBLE CONTRIBUTING FACTORS: FATIGUE, IT WAS XA00 BODY TIME FOR ME. COMPLACENCY, MY CONFIDENCE IN VNAV WAS EXTREMELY HIGH. DISTR, FINISHING THE CHKLST AT A CRITICAL TIME (LEVELOFF) TOOK ME OFF THE INSTS AND WHY I WENT LOOKING IN MY PUBS AFTER THE CHKLST I AM NOT SURE. CLRRLY MORE VIGILANCE TO BACKING UP THE PF IS REQUIRED IN THIS CRITICAL PHASE OF FLT. CONTINUAL ALT AWARENESS MUST BE IN THE SCAN REGARDLESS OF WHAT ADDITIONAL TASK WE MAY BE DOING UNTIL ALT CAPTURE AND HOLD ARE VERIFIED ON THE ADI. THIS MAY REQUIRE A PAUSE IN THE CHKLST OR ANY OTHER TASK TO COME BACK TO THE ALTIMETER AND VSI EVERY FEW SECONDS UNTIL ALT HOLD IS CONFIRMED.

Synopsis :

B767-300 CREW HAD ALT AND TRACK DEV ON THE PDZ 4 ARR TO LAX.

Time

Date : 200111

Day : Mon

Local Time Of Day : 1801 To 2400

Place

Locale Reference.Airport : ISP.Airport

State Reference : NY

Altitude.MSL.Bound Lower : 1500

Altitude.MSL.Bound Upper : 2000

Environment

Flight Conditions : IMC

Aircraft / 1

Controlling Facilities.TRACON : N90.TRACON

Operator.General Aviation : Personal

Make Model : Chancellor 414A & C414

Mission : Business

Flight Phase.Descent : Approach

Route In Use.Arrival : On Vectors

Component / 1

Aircraft Component : ILS/VOR

Aircraft Reference : X

Component / 2

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 990

Experience.Flight Time.Last 90 Days : 24

Experience.Flight Time.Type : 110

ASRS Report : 530568

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Approach

Events

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Inflight Encounter : Weather

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 2

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Resolatory Action.Controller : Issued Alert

Resolatory Action.None Taken : Detected After The Fact

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

I WAS BEING VECTORED FOR THE ILS RWY 24 APCH AT ISLIP ARPT. THE #1 CDI WOULD NOT PULL A FLAG SO I FLEW THE LOC ON THE #2 CDI. I HAD TO USE THE GPS TO IDENT CORAM INTXN. THE VECTOR APPEARED TO PUT US WELL INSIDE CORAM WHERE ONCE ESTABLISH THE ALT IS 1500 FT MSL. THE CTLR CLRED US FOR THE APCH AND SAID MAINTAIN 2000 FT TILL ESTABLISHED. WITHOUT VERIFYING I WAS TRULY INSIDE CORAM, I DSNDED TO 1500 FT. THE CTLR ISSUED A LOW ALT ALERT. I CHKED THE GPS AND REALIZED I WAS 1/2 MI OUTSIDE CORAM. I PULLED UP TO 2000 FT. THE MISTAKE WAS ASSUMING I WAS INSIDE THE CORAM FIX AND NOT CHKING THE GPS.

Synopsis :

C414 PLT DSNDED BELOW MINIMUM CHARTED ALT BECAUSE HE ATTEMPTED TO USE A GPS TO IDENT THE DSCNT INTXN.

Time

Date : 200111

Day : Tue

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : SBY.Airport

State Reference : MD

Altitude.MSL.Single Value : 10000

Environment

Flight Conditions : Mixed

Aircraft / 1

Controlling Facilities.ARTCC : ZDC.ARTCC

Operator.General Aviation : Corporate

Make Model : PA-32 Cherokee Six/Lance/Saratoga

Mission : Test Flight

Flight Phase.Cruise : Level

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 2160

Experience.Flight Time.Last 90 Days : 150

Experience.Flight Time.Type : 200

ASRS Report : 530941

Person / 2

Function.Controller : Radar

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Airspace Violation : Entry

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 2

Resolatory Action.Flight Crew : Exited Penetrated Airspace

Resolatory Action.Controller : Issued Alert

Resolatory Action.None Taken : Detected After The Fact

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

DURING AN IFR FLT FOR ENG (TEST/MAINT) OUT OF MTN, I WAS APCHING HEDGE INXTN AND CTR ADVISED ME 'AFTER HEDGE, GO DIRECT SALISBURY, THEN DIRECT SNOW HILL (VOR).' AS I DEPARTED HEDGE INTXN, I INADVERTENTLY ENTERED 'DIRECT SWL' INSTEAD OF 'DIRECT SBY.' A SHORT WHILE LATER, CTR INQUIRED IF I WAS DIRECT SALISBURY AND I ADVISED THAT I WAS DIRECT SNOW HILL (SWL). THE CTLR REQUESTED (VERY POLITELY) THAT I GO 'DIRECT SALISBURY (SBY)' TO EXIT THE ACTIVE RESTR AREA. I IMMEDIATELY EXECUTED A L TURN AND EXITED THE RESTR AREA, AND AS I DID, I SWITCHED THE GPS TO THE MAP-MODE AND NOTICED THAT I WAS, IN FACT, SKIRTING INSIDE R-4006. MOMENTS LATER, I WAS CLR AND NOTHING ELSE WAS SAID FROM CTR. SEVERAL THINGS CAUSED THIS ERROR, OF WHICH I AM TO BLAME: 1) I WAS RECORDING MANY ENG PARAMETER READINGS AND WRITING A LOT WHEN CTR GAVE ME THE CLRNC TO SBY AFTER HEDGE, AND I COMPREHENDED 'SWL' INSTEAD OF 'SBY' WHEN ENTERING THE NEW WAYPOINT, I WAS DISTRACTED ENOUGH. 2) SNOW HILL IS ALMOST IN LINE WITH SALISBURY, SO AS I FLEW FURTHER ALONG, THERE WAS NO ABRUPT HEADING CHANGE, TO ALERT ATC (OR ME) THAT I WAS 'DIRECT' TO THE WRONG VOR UNTIL I ACTUALLY STRAYED INTO THE CORNER OF IT (THE R-4006). 3) A QUICK REVIEW OF MY ENRTE CHART AFTER RECEIVING 'DIRECT SALISBURY' WOULD HAVE KEPT ME CLR, AND PROBABLY WOULD HAVE ALERTED ME TO THE WRONG WAYPOINT/PENDING INCURSION, ENOUGH TO INQUIRE ABOUT THE (WRONGLY PERCEIVED) CLRNC. 4) MONITORING THE 'MOVING MAP' PAGE OF THE GPS WOULD ALSO HELP, SINCE MOST RESTR/PROHIBITED AREAS ARE SHOWN.

Synopsis :

PA32 PLT ENTERED AN INCORRECT WAYPOINT IN THE ACFT GPS NAV COMPUTER AND ENTERED A RESTR AREA AS A CONSEQUENCE.

Time

Date : 200112

Day : Mon

Local Time Of Day : 1801 To 2400

Place

Locale Reference.Airport : OLV.Airport

State Reference : MS

Altitude.MSL.Single Value : 1500

Environment

Flight Conditions : IMC

Aircraft / 1

Controlling Facilities.TRACON : MEM.TRACON

Operator.General Aviation : Personal

Make Model : PA-30 Twin Commanche

Mission : Pleasure

Navigation In Use.Other : GPS

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 15000

Experience.Flight Time.Last 90 Days : 40

Experience.Flight Time.Type : 1500

ASRS Report : 531180

Person / 2

Function.Controller : Approach

Events

Anomaly.Other Spatial Deviation : Controlled Flight Towards Terrain

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 2

Resolatory Action.Controller : Issued Alert

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Airspace Structure

Problem Areas : Flight Crew Human Performance

Narrative :

APCHING OLV ON (NDB) OR GPS APCH RWY 36, FLYING THE GPS APCH. ESTABLISHED INBOUND 2000 FT AND PASSED 6 MI FROM EHAGO INTXN, STARTED DSCNT TO MDA 1080 FT. AT APPROX 1500 FT APCH EXCITEDLY INFORMED ME OF A LOW ALT ALERT AND TO STOP DSCNT IMMEDIATELY. I STOPPED DSCNT UNTIL I WAS NOTIFIED ALT ALERT STOPPED. CONTINUED APCH, BROKE OUT OF CLOUDS AND CANCELED IFR, PROCEEDED VISUALLY. IN REVIEWING THE COMMERCIAL CHART PLATE IT SHOWS DSCNT FROM 2000 FT WITHIN 10 NM APPLICABLE AND THE PROFILE VIEW SHOWS YOU SHOULD BE LEVEL AT MINIMUMS BEFORE EHAGO. THIS IS WHAT I WAS DOING. WILL THERE ALWAYS BE A LOW ALT ALERT WHEN SHOOTING THE APCH AS PUBLISHED? AN INTERESTING OBSERVATION: THE COMMERCIAL CHART PROFILE VIEW DEPICTS YOU SHOULD BE LEVEL AT MINIMUMS BEFORE EHAGO WHILE COMPARED TO THE GOV CHARTS THEY DO NOT DEPICT THIS BUT A DSCNT (CONSTANT) THROUGH EHAGO. WHY THE DIFFERENCE? CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATED THAT HE HAD MADE THIS APCH SEVERAL TIMES IN THE PAST AND HAD NEVER HAD A LOW ALT ALERT. HE SUGGESTED THAT IT MIGHT BE BECAUSE HE WAS HELD HIGH PRIOR TO APCH CLRNC CAUSING HIM TO ESTABLISH A HIGHER RATE OF DSCNT FURTHER OUT IN THE PROC TURN LIMITS. HE WAS ADVISED THAT THE APCH DSCNT CHART DEPICTIONS ARE NOT TO SCALE AND ARE JUST A VISUAL REF TO MAKE A NON PRECISION DSCNT TO THE MDA PRIOR TO THE ARPT.

Synopsis :

PIPER PA30 TWIN COMMANCHE, CAUSED A LOW ALT ALERT FROM APCH CTL DURING A GPS APCH. RPTR WONDERED IF EVERYONE WOULD RECEIVE AN ALERT AND WHY THE DIFFERENCE IN THE PROFILE DEPICTION OF THE APCH DSCNT BTWN THE COMMERCIAL AND THE NOAA APCH CHARTS.

Time

Date : 200112

Day : Sun

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : GBR.Airport

State Reference : MA

Altitude.MSL.Bound Lower : 5700

Altitude.MSL.Bound Upper : 6300

Environment

Flight Conditions : VMC

Ceiling.Single Value : 5000

Aircraft / 1

Controlling Facilities.ARTCC : ZBW.ARTCC

Controlling Facilities.TRACON : BDL.TRACON

Operator.General Aviation : Personal

Make Model : Skylane 182/Rg Turbo Skylane/Rg

Mission : Pleasure

Navigation In Use.Other : GPS

Flight Phase.Cruise : Level

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 1100

Experience.Flight Time.Last 90 Days : 20

Experience.Flight Time.Type : 1000

ASRS Report : 532105

Person / 2

Function.Controller : Approach

Person / 3

Function.Controller : Radar

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 2

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Consequence.FAA : Reviewed Incident With Flight Crew

Consequence.Other : Maintenance Action

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

MY GPS INDICATED AN ALT OF 5700 FT MSL. MY ALTIMETER INDICATED 6000 FT MSL. BELIEVING MY GPS, I CORRECTED MY ALT TO HAVE THE GPS SHOW 6000 FT, THE ALT I WAS ASSIGNED BY ATC. ATC INFORMED ME THAT MY ALT WAS THEN 6300 FT. I CORRECTED ACCORDINGLY, AND HAVE CONTACTED THE MANUFACTURERS OF THE GPS FOR REPAIR OF THE INST.

Synopsis :

A C172 PLT, CRUISING AT 6000 FT OVER BGR, BELIEVED THE ALT DISPLAYED BY HIS GPS WAS CORRECT. IT WAS INCORRECT BY 300 FT.

Time

Date : 200112

Day : Fri

Local Time Of Day : 1801 To 2400

Place

State Reference : AZ

Altitude.MSL.Single Value : 28000

Aircraft / 1

Controlling Facilities.ARTCC : ZAB.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : MD-80 Super 80

Mission : Passenger

Navigation In Use.Other : GPS

Flight Phase.Cruise : Level

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 532705

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Radar

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Non Adherence : Clearance

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.None Taken : Detected After The Fact

Consequence.FAA : Reviewed Incident With Flight Crew

Consequence.Other : Company Review

Supplementary

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Problem Areas : FAA

Problem Areas : Navigational Facility

Narrative :

AFTER 2 HRS ON THE SAME HEADING, DIRECT TNP, THE ACFT SUDDENLY BEGAN TO ROLL TO THE L. WE STOPPED IT, THEN THE ALERT CAME UP ON THE GPS SCREEN. ZAB TOLD US THE MIL WAS JAMMING GPS FREQS, THOUGH THE NOTAM HAD ONLY BEEN ISSUED 20 MINS PRIOR. NO CONFLICT WITH OTHER ACFT, NO REAL PROB FOR US BUT IT SEEMS LIKE SOMEBODY IN THE SYS SHOULD HAVE WARNED US. ZAB SAID SOME OTHER ACFT HAD SIMILAR PROBS.

Synopsis :

AN MD80 CREW, WHILE CRUISING AT FL280, EXPERIENCED AN UNEXPLAINED ACFT ROLL TO THE L.

Time

Date : 200112

Day : Wed

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : HUT.Airport

State Reference : KS

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : IMC

Aircraft / 1

Controlling Facilities.ARTCC : ZKC.ARTCC

Operator.General Aviation : Corporate

Make Model : Super King Air 200 Hdc

Mission : Test Flight

Flight Phase.Descent : Approach

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 12850

Experience.Flight Time.Last 90 Days : 150

Experience.Flight Time.Type : 4500

ASRS Report : 532818

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Radar

Person / 4

Function.Controller : Radar

Events

Anomaly.Inflight Encounter : Weather

Independent Detector.Other.ControllerA : 4

Resolutive Action.Controller : Issued New Clearance

Supplementary

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Problem Areas : Weather

Narrative :

THE PURPOSE OF THIS FLT WAS TO VERIFY THE FUNCTION OF 2 INSTALLED GPS SYS. DURING THE COURSE OF THE FLT, WHICH WAS CONDUCTED FROM BEC TO HUT AND BACK TO BEC, I FLEW 3 GPS APCHS AN HELD 3 TIMES. AFTER LEVELING AT 5000 FT AND DESCRIBING THE TEST REQUIREMENTS TO THE ATC CTLR, I WAS CLRED FOR THE GPS RWY 31 APCH AT HUT. I CHANGED FREQS AND THE CTLR WAS VERY BUSY AND CANCELED MY APCH AND TOLD ME TO HOLD AS PUBLISHED OVER THE VOR. I WAS LESS THAN 2 MINS FROM THE VOR AND I PROCEEDED TO THE VOR AND ENTERED THE HOLD. I MADE 1 TURN IN HOLDING AND WAS CLRED FOR THE GPS RWY 31 APCH AGAIN, WHEREUPON I TURNED AND PROCEEDED TO THE IAF OF A 'T' STYLE GPS APCH. UPON ARRIVING AT THE TURN POINT FOR TURNING TO FINAL, THE CTLR ASKED ME TO PROCEED OUTBOUND AGAIN, SO I TURNED TO GO OUT TO THE IAF FOR THE APCH AGAIN. THE CTLR ASKED ME TO PROCEED OUTBOUND AGAIN, WHICH I DID. HE THEN CLRED ME FOR THE APCH AND THE MISSED PROCS WERE TO CLB TO 4000 FT AND FLY RWY HEADING. DURING THE MISSED AT APPROX 2 MI FROM THE NDB, THE CTLR CLRED ME TO HOLD THERE AS PUBLISHED. I ENTERED THE HOLD AND MADE 2 TURNS AND WAS THEN CLRED FOR THE GPS RWY 13 APCH AND WHEN I COMPLETED THE APCH, I WAS GIVEN RADAR VECTORS TO THE GPS RWY 36 APCH AT BEC. THIS WAS A MOST CONFUSING FLT TO ME AND PERHAPS TO THE CTLR. THERE WERE 2 CLRNCS TO HOLD WITH LESS THAN THE REQUISITE TIME FOR PLANNING AS SET FORTH IN THE CTLR'S MANUAL. THERE WAS ALSO THE UNORTHODOX METHOD OF 'HOLDING' WHERE THE CTLR REQUESTED THAT I TURN OUTBOUND AGAIN. THERE WAS CLRNC FOR APCH AND CANCELLATION OF THE SAME SEVERAL TIMES DURING THIS FLT. I AM SURE THAT THE WX EXACERBATED THE PROBS, HOWEVER, I BELIEVE THE FLT COULD HAVE GONE MUCH MORE SMOOTHLY HAD THE SECOND CTLR STUCK WITH THE PLAN THAT MY FIRST CTLR AND I HAD AGREED UPON. THERE WERE FAR TOO MANY CHANGES AND REDIRECTIONS DURING THIS FLT!

Synopsis :

BE20 FLT TEST CREW CHALLENGES ZKC CTLR'S METHOD AND TIMELINESS OF ISSUED HOLDING AND CTL INSTRUCTIONS.

Time

Date : 200112

Day : Fri

Local Time Of Day : 1201 To 1800

Place

Altitude.MSL.Single Value : 34000

Environment

Flight Conditions : VMC

Ceiling : CLR

Aircraft / 1

Operator.Common Carrier : Air Carrier

Make Model : DC-10 Undifferentiated or Other Model

Mission : Freight

Navigation In Use.Other : FMS or FMC

Navigation In Use.Other : GPS

Flight Phase.Cruise : Level

Route In Use.Enroute : Pacific

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 13750

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 500

ASRS Report : 533914

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Flight Crew : Second Officer

Person / 4

Function.Controller : Non Radar

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2 & 3

Resolatory Action.None Taken : Anomaly Accepted

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

WHEN MAKING OUR DUETS POS RPT WHILE FLYING WBOUND ON THE DELTA TRACK BTWN LOS ANGELES AND HONOLULU, WE ESTIMATED DOPPS (THE NEXT REQUIRED POS RPT) AT XA02Z BASED ON THE DISPLAYED DATA OF OUR #1 GPS SYS. FOR A PERIOD OF ABOUT A HALF HR IN THE VICINITY OF DONER (THE NEXT WAYPOINT AFTER DUETS) WE ENCOUNTERED MODERATE CLR AIR TURB ACCOMPANIED BY RAPID INCREASES AND DECREASES IN MACH SPD, WHICH REQUIRED SEVERAL PWR ADJUSTMENTS. JUST PRIOR TO REACHING AND RPTING DOPPS WE NOTICED THAT THE #1 GPS WAS NOW ESTIMATING DOPPS AT XA07Z, A VARIANCE OF 5 MINS. UPON CHKING WE REALIZED THAT THE #1 GPS, WHICH WAS BEING USED FOR POS RPTING, HAD EITHER DROPPED OR HAD NEVER PROPERLY RECEIVED, THE FORECAST WINDS ALOFT DATA WHICH HAD BEEN INPUTTED INTO THE #2 GPS AND XMITTED TO THE #1. APPARENTLY THE #1 GPS HAD BEEN ESTIMATING FIXES USING ITS OWN SPOT WIND CALCULATIONS INSTEAD OF FORECAST WINDS. THIS COMBINED WITH THE LOSS OF AIRSPD DURING ENCOUNTERS OF TURB PROBABLY CAUSED THE INACCURATE ESTIMATE. CLOSER XCHKING BTWN GPS SYS AND BETTER AWARENESS OF THE EFFECT OF AIRSPD DEVS ON PROJECTED TIME ESTIMATES MAY HAVE AVOIDED THIS PROB.

Synopsis :

DC10 CREW MISSED A POS ESTIMATED BY 5 MINS ON THE HAWAIIAN TRACKS FROM THE MAINLAND.

Time

Date : 200112

Day : Fri

Local Time Of Day : 1201 To 1800

Place

State Reference : MS

Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.ARTCC : ZHU.ARTCC

Operator.General Aviation : Personal

Make Model : PA-30 Twin Commanche

Mission : Pleasure

Navigation In Use.Other : GPS

Navigation In Use.Other : Loran

Flight Phase.Cruise : Level

Route In Use.Enroute : Direct

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Component / 2

Aircraft Component : Loran

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 3300

Experience.Flight Time.Last 90 Days : 75

Experience.Flight Time.Type : 400

ASRS Report : 533932

Person / 2

Function.Controller : Radar

Events

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Supplementary

Problem Areas : Aircraft

Problem Areas : FAA

Problem Areas : Flight Crew Human Performance

Narrative :

WHILE FLYING IN VISUAL FLT CONDITIONS ON AN IFR CLRNC, PLT REQUESTED DIRECT TO MLU ARPT FROM APCH CTLR. PLT RECEIVED AND ACCEPTED A CLRNC DIRECT TO PICAN INTXN THEN DIRECT TO MLU. USING ALL AVAILABLE ONBOARD NAV EQUIP, THE INITIAL REQUEST AND SUBSEQUENT CLRNC SEEMED ACCEPTABLE. PLT WAS USING VOR, GPS AND LORAN INFO SIMULTANEOUSLY. HOWEVER, BOTH THE GPS AND LORAN THAT WERE PLANNED TO BE USED TO NAV TO MLU AFTER PICAN WERE VFR CERTIFIED ONLY. THE LORAN IS INDICATED TO BE VFR ONLY VIA TAPE ABOVE THE UNIT AND WAS NOT RELIED UPON BY THE PLT (BUT USED AS A BACKUP ONLY), HOWEVER, NO SUCH MARKINGS APPEAR ON THE GPS WHILE USING ANY OF THE NAV OR FLT PLAN FUNCTIONS. PLT IS USED TO FLYING WITH ONBOARD IFR CERTIFIED AREA NAV EQUIP SUCH AS GPS AND INS. PLT CORRECTLY FILED THE FLT PLAN USING ACFT EQUIP SUFFIX OF 'U,' BUT WAS LULLED INTO USING THE GPS (BY HABIT) TO ACCEPT THE CLRNC DIRECT MLU FOLLOWING PICAN. DURING CRUISE/NAV TO PICAN WITH HDOF TO CTR, CTR CTLR CORRECTLY QUERIED THE PLT AS TO HOW HE PLANNED TO NAV TO MLU AFTER PICAN (ASSUME HE SAW THE 'U' EQUIP SUFFIX ON THE FLT PLAN). PLT RESPONDED VIA GPS. CTLR THEN ASKED IF GPS WAS IFR CERTIFIED. PLT RESPONDED YES (AGAIN BASED ON HABIT OF FLYING WITH SUCH EQUIP AND THE LACK OF WARNINGS ON THE GPS NAV DISPLAY PAGES). AFTER SEVERAL MINS OF CONFUSION ABOUT WHY THE CTLR WAS SO CONCERNED, PLT REALIZED THE POTENTIAL ERROR AND REQUESTED AND RECEIVED DIRECT JAN VOR AFTER PICAN. UPON ARR AT PICAN, PLT TUNED, IDENTED, MONITORED AND PROCEEDED TO JAN VOR AS CLRED. THE EASE OF GPS NAV COMBINED WITH THE WIDE VARIETY AND TYPES OF IFR CERTIFIED AND NON-IFR CERTIFIED GPS UNITS MAKE IT POSSIBLE AND LIKELY THAT OTHER PLTS MAY MAKE THIS TYPE OF MISTAKE. WARNINGS SUCH AS VFR ONLY NEED TO APPEAR EITHER ON THE UNIT ITSELF, OR ON THE PAGES CONTAINING NAV FUNCTIONS.

Synopsis :

PA30 PLT WAS USING UNAPPROVED GPS AND LORAN EQUIP ON AN IFR FLT.

Time

Date : 200112

Day : Thu

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : EGKK.Airport

State Reference : FO

Altitude.MSL.Single Value : 1000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : EGKK.TRACON

Operator.Common Carrier : Air Carrier

Make Model : MD-11

Mission : Passenger

Navigation In Use.Other : FMS or FMC

Flight Phase.Climbout : Intermediate Altitude

Route In Use.Departure.SID : N/S

Route In Use.Departure : On Vectors

Component / 1

Aircraft Component : FMS/FMC

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 20000

Experience.Flight Time.Last 90 Days : 250

Experience.Flight Time.Type : 250

ASRS Report : 534084

Person / 2

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 4000

Experience.Flight Time.Last 90 Days : 100

Experience.Flight Time.Type : 220

ASRS Report : 534447

Person / 3

Function.Flight Crew : Second Officer

Person / 4

Function.Controller : Departure

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Returned To Original Clearance

Supplementary

Problem Areas : Aircraft

Narrative :

ON TKOF FROM LGW, EXPERIENCED A MAP SHIFT WHICH COMMANDED ACFT TO TURN FURTHER R THAN NECESSARY FOR NAV INTERCEPT. WENT TO HDG SELECT AND IMMEDIATELY RETURNED BACK TO PROPER COURSE. SUPPLEMENTAL INFO FROM ACN 534447: TOOK OFF FROM LGW ON SID. EXPERIENCED A NAV MAP SHIFT. FLT DIRECTORS INDICATED A R TURN TO INTERCEPT DEP RADIAL. CAPT FOLLOWED FLT DIRECTOR. WHEN PROB DETECTED, CAPT IMMEDIATELY TURNED L TO REINTERCEPT CORRECT RADIAL AND DEP. SWITCHED TO DEP FREQ AND RECEIVED VECTORS. NO CONFLICT OCCURRED. TOTAL DEV LESS THAN 1 MI.

Synopsis :

MD11 CREW EXPERIENCED MAP SHIFT DEPARTING EGKK.

Time

Date : 200112

Day : Mon

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : CVG.Airport

State Reference : OH

Altitude.MSL.Single Value : 5500

Environment

Flight Conditions : VMC

Ceiling.Single Value : 10

Aircraft / 1

Controlling Facilities.Tower : CVG.Tower

Operator.Common Carrier : Air Carrier

Make Model : PA-28 Cherokee/Archer II/Dakota/Pillan/Warrior

Mission : Passenger

Flight Phase.Descent : Approach

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 870

Experience.Flight Time.Last 90 Days : 17

Experience.Flight Time.Type : 170

ASRS Report : 534115

Person / 2

Function.Controller : Approach

Person / 3

Function.Controller : Approach

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Airspace Violation : Entry

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 2

Resolatory Action.Controller : Issued Advisory

Resolatory Action.Controller : Issued New Clearance

Consequence.FAA : Investigated

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

INADVERTENT FLT INTO CINCINNATI CLASS B AIRSPACE. FLT PROCEEDED AS PLANNED AND FILED TO SHB. I USED THE GPS AS A XCHK TYPICALLY USING THE GPS AS A VOR IN THE TO/FROM METHOD. I WAS XCHKING IN BTWN NAVAIDS WITH THE VOR AND ADF. ON THE LAST LEG OF THE FLT I WAS USING THE GPS AS THE PRIMARY NAV AS THERE IS NO AIRWAY DEFINED BTWN SHB AND MGY. THE RTE OF THE LAST LEG OF THE TRIP (SHB TO MGY) MAKES A COURSE JUST N THE CINCINNATI CLASS B AIRSPACE. I ELECTED NOT TO USE INDIANAPOLIS APCH FOR FLT FOLLOWING AS MY COURSE WAS N OF THAT LOCATION. I WAS INTENDING TO USE DAYTON APCH AS I GOT CLOSER TO MGY AND PLANNED TO RPT TO DAYTON APCH WHEN I WAS DIRECTLY S OF RID. AS I WAS ABOUT TO CONTACT DAYTON APCH, I DIALED IN RID ON THE DME. UPON CONTACT WITH DAYTON APCH, I ADVISED THAT I WAS ON THE 180 DEG RADIAL OF RID AND 25 MI S. AT THAT TIME DAYTON ADVISED ME THAT I WAS OUT OF THEIR AIRSPACE AND IN CVG CLASS B AIRSPACE AT WHICH TIME THEY ADVISED ME TO CALL CVG APCH. I WAS ADVISED BY CVG APCH THAT I WAS IN CLASS B AIRSPACE. THE CVG APCH CTLR DIRECTED ME FOR HDGS TO MGY AND GAVE ME A NUMBER TO CALL UPON LNDG. THE 10-20 MINS THAT THIS ISSUED PLAYED OUT WENT QUICKLY WITH LITTLE TIME TO DIAGNOSE WHAT WENT WRONG WITH A PLAN THAT SHOULD HAVE BEEN EASY TO FOLLOW. THE REASON THAT I WAS CONFUSED IS THAT I WAS TRACKING TO WHAT I HAD DIALED IN WHICH IS NOT WHERE I INTENDED TO FLY. I HAD FORGOTTEN TO ENTER THE 'K' BUT WAS NOT AWARE OF THE MISTAKE AS THE GPS GAVE ME A LOCATION THAT APPEARED TO BE WHAT I WANTED. I HAVE REVIEWED THE CINCINNATI CHARTS AND FOUND NO MGY NAVAIDS WITH THAT IDENT. I HAVE ASKED GPS COMPANY TO CHK THEIR DATABASE AND CONFIRM THAT MGY DOES NOT EXIST. I CONCLUDE THAT THIS LOCATION (MGY) HAS BEEN CREATED AND STORED AS A USER IDENTED LOCATION. FAILURE TO TRACK THE SHB 'FROM' RADIAL LONG ENOUGH TO ESTABLISH A GOOD COURSE DIRECTION TO XCHK AGAINST THE GPS. FAILURE TO VERIFY VFR POS BY GND REF TO ESTABLISH GOOD COURSE DIRECTION. FAILURE TO OPERATE WITH ALL AVAILABLE CTL CTRS. UTILIZING THE IFR SYS WITH VFR WX WOULD HAVE BEEN A GOOD OPTION. BELIEVING THAT THE GPS WAS BETTER THAN ALL OTHER FORMS OF NAV AVAILABLE AT THE TIME WAS A POOR DECISION, WHICH WAS AGAINST THE BASIC PREMISE OF VFR FLT.

Synopsis :

A PA28 CFI WANDERS INTO THE CLASS B AIRSPACE OF CVG WHEN DEPENDING SOLELY UPON THE NAV INFO FROM HIS GPS WHICH WAS UNKNOWINGLY MISPROGRAMMED TO A POINT 25 MI S OF RID, IN.

Time

Date : 200201

Day : Thu

Local Time Of Day : 0001 To 0600

Place

Locale Reference.Airport : AOO.Airport

State Reference : AL

Altitude.MSL.Single Value : 2600

Environment

Flight Conditions : IMC

Ceiling.Single Value : 400

Aircraft / 1

Controlling Facilities.ARTCC : ZTL.ARTCC

Operator.General Aviation : Personal

Make Model : Citation V

Mission : Passenger

Navigation In Use.Other : FMS or FMC

Route In Use.Approach : Instrument Non Precision

Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 3100

Experience.Flight Time.Last 90 Days : 150

Experience.Flight Time.Type : 460

ASRS Report : 536633

Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

Person / 3

Function.Controller : Radar

Events

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.None Taken : Anomaly Accepted

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

UPON RETURNING TO AUBURN, AL, THE WX WAS RPTED BY AWOS AS 400 FT OVCST AND 10 MI VISIBILITY, WINDS FROM THE S AT 8-10 KTS. THE APCHS AT AUBURN ARE: LOC, VOR/DME-A, GPS, NDB. THE LOC HAS BEEN DECOMMISSIONED BUT OUR FMS HAS THE APCH IN THE DATABASE. THE CAPT ELECTED TO SHOOT THE LOC RWY 36, USING THE FMS DATABASE AS PRIMARY MEANS OF NAV. I TOLD HIM THAT WE COULD NOT DO IT BECAUSE THE FMS (IN THAT INSTANCE) CAN BE USED ONLY AS A BACK-UP. HE SAID IT WAS LEGAL TO DO THE LOC APCH SINCE IT WAS IN THE DATABASE AND HAD A 'G' NEXT TO IT, MEANING GPS. I ARGUED AGAIN BUT HE DECIDED TO STICK TO THAT APCH ANYWAY. INBOUND TO THE RWY, THE WX HAD IMPROVED AND WE ENDED UP SEEING THE RWY WELL BEFORE MINIMUMS. THERE NEEDS TO BE MORE EMPHASIS ON THE DIFFERENCE BTWN A GPS OVERLAY AND A 'FULL BLOWN' GPS APCH SUCH AS A VOR OR GPS APCH. CALLBACK CONVERSATION WITH A 'KAUO' ARPT OPS SPECIALIST REVEALED THE FOLLOWING INFO: THE LOC FOR RWY 36 WAS SHUT DOWN ON DEC/4/00 DUE TO RWY CONSTRUCTION. THE LENGTH OF RWY 18/36 WAS INCREASED TO 5265 FT. UNSURE WHEN THE LOC WILL BE BACK IN SVC.

Synopsis :

A C560 CREW, ON APCH TO KAUO, FLEW A GPS ONLY APCH, LOC WAS OTS.

Time

Date : 200201

Day : Wed

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : ZZZ1.Airport

State Reference : VA

Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : ZZZ1.TRACON

Operator.General Aviation : Personal

Make Model : M-20 Series Undifferentiated or Other Model

Mission : Passenger

Route In Use.Enroute : On Vectors

Route In Use.Approach : Visual

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 290

Experience.Flight Time.Last 90 Days : 70

Experience.Flight Time.Type : 230

ASRS Report : 536816

Person / 2

Function.Controller : Supervisor

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Airspace Violation : Entry

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Resolatory Action.None Taken : Detected After The Fact

Consequence.FAA : Investigated

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Airspace Structure

Problem Areas : Flight Crew Human Performance

Narrative :

UPON VFR DEP FROM ZZZ, HEADED WBOUND OUT AROUND R66088B AND DEMO 2 AND 3 MOA, ATC DIRECTED VECTOR OF 90 DEGS AND DENIED ACCESS TO CLASS B AIRSPACE. WHILE ON 90 DEG VECTOR, I LOST RADIO CONTACT. UPON RECEIVING RADIO RELAY FROM AN ACR FLT, I LANDED ZZZ1 DEPARTED ZZZ1 FOR VFR DIRECT ZZZ2. AT MID FIELD ZZZ1 MADE A R TURN TO AVOID R6611A AND R6613A. AT NO TIME DID MY GPS INDICATE I WAS INSIDE RESTR AIRSPACE. UPON RETURN TO HOME FBO RADIO WAS REPLACED. ON 2/MON/02, I WAS CONTACTED BY FAA AND INFORMED OF A POTENTIAL VIOLATION OF RESTR AIRSPACE.

Synopsis :

M20P PLT IS ACCUSED OF ENTERING RESTR AIRSPACE.

Time

Date : 200202

Day : Thu

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : TUP.Airport

State Reference : MS

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.Tower : TUP.Tower

Operator.General Aviation : Personal

Make Model : PA-28 Cherokee/Archer II/Dakota/Pillan/Warrior

Mission : Business

Flight Phase.Descent : Approach

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 250

Experience.Flight Time.Last 90 Days : 6

Experience.Flight Time.Type : 250

ASRS Report : 538699

Person / 2

Function.Controller : Local

Person / 3

Function.Oversight : Supervisor

Events

Anomaly.Airspace Violation : Entry

Anomaly.Incursion : Runway

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.None Taken : Detected After The Fact

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Chart Or Publication

Problem Areas : Flight Crew Human Performance

Narrative :

A VFR FLT FROM SHELBYVILLE, TN, TO TUPELO, MS, I ENTERED A TWR CTLED AIRSPACE WITHOUT FIRST MAKING CONTACT. DURING MY PLANNING STAGE I USED A NEW TO ME INTERNET SVC AND DOWNLOADED MY CHART. I DID NOT REALIZE THAT IT WAS IN A WAC FORMAT. I HAVE BEEN USED TO USING SECTIONALS. I DID NOT NOTICE THE TWR AT DEST. TO COMPOUND THE MISTAKE I USED THE FREQS IN MY VFR GPS TO MAKE MY CALLS AT THE DEST ARPT. THE TWR HAS BEEN IN PLACE FOR 3 YRS AND WAS NOT IN MY GPS DATABASE. THE ERROR WAS CAUSED BY IMPROPER FLT PLANNING ON MY PART. I CONTACTED THE TWR IMMEDIATELY UPON LNDG. I HAVE SINCE THOROUGHLY REVIEWED ALL PHASES OF FLT PLANNING AND CHART READING AND WILL NEVER MAKE THIS MISTAKE AGAIN.

Synopsis :

A PA28 PLT USING INFERIOR CHARTS AND OUTDATED INFO, LANDED AT A TWRED ARPT ASSUMING IT DID NOT HAVE A TWR.

Time

Date : 200202

Day : Thu

Local Time Of Day : 0601 To 1200

Place

State Reference : WA

Altitude.MSL.Bound Lower : 5000

Altitude.MSL.Bound Upper : 7000

Environment

Flight Conditions : IMC

Aircraft / 1

Controlling Facilities.ARTCC : ZSE.ARTCC

Operator.General Aviation : Corporate

Make Model : Conquest/Conquest II

Mission : Business

Navigation In Use.Other : GPS

Flight Phase.Landing : Missed Approach

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 15000

Experience.Flight Time.Last 90 Days : 120

Experience.Flight Time.Type : 1000

ASRS Report : 539272

Person / 2

Function.Controller : Radar

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolutory Action.Flight Crew : Became Reoriented

Resolutory Action.Flight Crew : Executed Missed Approach

Supplementary

Problem Areas : Airport

Problem Areas : Airspace Structure

Problem Areas : Chart Or Publication

Problem Areas : Flight Crew Human Performance

Problem Areas : Weather

Narrative :

I WAS SHOOTING THE GPS APCH INTO OMAK, WA, WHEN I SAW A RIDGE THROUGH A HOLE IN THE CLOUDS THAT LOOKED TOO CLOSE AND MY RAD ALT WAS COUNTING DOWN THROUGH 600 FT. THIS CAUSED ME TO BELIEVE I COULD BE W OF WHERE I SHOULD BE AND I EXECUTED AN IMMEDIATE MISSED APCH TO ON TOP (7000 FT) INSTEAD OF THE PUBLISHED 5000 FT. I DID THAT BECAUSE I WAS UNSURE OF MY POS AND DECIDED THAT IF I WAS IN THE WRONG PLACE, THE PUBLISHED MISSED APCH PROC WOULDN'T GUARANTEE MY SAFETY. MY ALTIMETER WAS PROPERLY SET, MOVING MAP ON KLN 90B OPS AGREED WITH HSI THAT I WAS ON COURSE. I CLBED BECAUSE I THOUGHT TERPS WOULD GUARANTEE 1000 FT TERRAIN SEPARATION. DOES IT? SINCE THEN, I HAVE SUPERIMPOSED THIS APCH ON A SEATTLE SECTIONAL CHART AND FOUND TERRAIN IN EXCESS OF 3000 FT, BUT LESS THAN 3800 FT BELOW A SEGMENT OF THE APCH THAT ALLOWS DSCNT TO 3900 FT. THAT GIVES ME 900 FT TO 400 FT CLRNC BTWN ETORY AND CF35. IS THAT ENOUGH? CALLBACK CONVERSATION WITH A SAFETY INSPECTOR REVEALED THE FOLLOWING INFO: A SAFETY INSPECTOR WHO HAS FLOWN THE GPS APCH IN QUESTION MANY TIMES AND IS FAMILIAR WITH THE AREA REVEALED THAT THE RIDGE REFERRED TO BY THE RPTR DOES EXIST. WHEN THE APCH IS FLOWN AS DEPICTED ON THE GPS RWY 35 APCH CHART, A TERRAIN CLRNC OF APPROX 600 FT IS MAINTAINED WHILE PASSING OVER THE RIDGE. THE TERPS MANUAL WAS QUOTED AS STATING: ON NON PRECISION APCHS TERRAIN CLRNC IS PROVIDED TO 1000 FT DURING THE INITIAL SEGMENT AND TO 500 FT DURING THE FINAL SEGMENT OF THE APCH.

Synopsis :

A C425 PLT, ON APCH TO OMK, WA, EXECUTED A MISSED APCH, CITING HE WAS UNSURE OF HIS POS WITH REGARD TO THE FINAL APCH COURSE.

Time

Date : 200202

Day : Thu

Local Time Of Day : 0601 To 1200

Place

State Reference : NV

Altitude.MSL.Single Value : 27000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.ARTCC : ZLA.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : MD-80 Series (DC-9-80) Undifferentiated or Other Model

Mission : Passenger

Aircraft / 2

Navigation In Use.Other : GPS

Flight Phase.Descent : Intermediate Altitude

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 12000

Experience.Flight Time.Last 90 Days : 250

Experience.Flight Time.Type : 400

ASRS Report : 539522

Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

Person / 3

Function.Controller : Radar

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Inflight Encounter : Weather

Anomaly.Non Adherence : Clearance

Independent Detector.Other.ControllerA : 3

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Controller : Issued Alert

Resolatory Action.Controller : Issued New Clearance

Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary

Problem Areas : Flight Crew Human Performance

Problem Areas : Weather

Narrative :

WE WERE NAVING USING THE GPS. AFTER XING BEATTY VOR, OUR ARR (FUZZY 5) TO LAS HAS A TURN TO FLY THE 115 DEG COURSE TO FUZZY INTXN. OUR GPS TURNED TO GO DIRECTLY TO BOULDER VOR INSTEAD. WE WERE ABOUT 10 MI S OF BEATTY WHEN THE CTLR ASKED US TO TURN TO JOIN THE COURSE OUT OF BEATTY. WE WERE APPROX 5 MI OFF COURSE. THIS WAS THE LAST LEG OF A REALLY LONG DAY -- 8+ HRS OF BLOCK AND OVER 12 HRS OF DUTY. THE GPS HAD BEEN PROGRAMMED BUT DID NOT HAVE THE FUZZY 5 TRANSITION. THE CREW FAILED TO MONITOR THE GPS NAV DURING THE BUSY DSCNT AT A CRUCIAL TIME (A TURN). TOO MUCH TRUST WAS GIVEN TO AUTOMATION. LAS VEGAS WX WAS A 50 KT WIND AND A DUST STORM. WE WERE CONTEMPLATING OUR FUEL AND ALTERNATE DECISION WHEN THIS OCCURRED.

Synopsis :

AN MD80 CREW, ON ARR TO LAS, WATCHED THE ACFT TURN DIRECT TO BOULDER INSTEAD OF FLYING THE ARR.

Time

Date : 200203

Day : Sun

Local Time Of Day : 0001 To 0600

Place

Locale Reference.Airport : BWI.Airport

State Reference : MD

Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : BWI.TRACON

Controlling Facilities.Tower : BWI.Tower

Operator.Common Carrier : Air Carrier

Make Model : MD-80 Super 80

Mission : Passenger

Flight Phase.Descent : Approach

Route In Use.Approach : Visual

Component / 1

Aircraft Component : ILS/VOR

Aircraft Reference : X

Person / 1

Function.Flight Crew : First Officer

ASRS Report : 540652

Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 540651

Person / 3

Function.Observation : Observer

Person / 4

Function.Controller : Local

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerB : 4

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Became Reoriented

Resolatory Action.Flight Crew : Executed Missed Approach

Resolatory Action.Controller : Issued New Clearance

Consequence.FAA : Reviewed Incident With Flight Crew

Consequence.Other : Company Review

Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

WE WERE ON VECTORS FROM THE EMI 3 ARR TO BWI RWY 33L VISUAL. ON DOWNWIND, ATC ASKED IF WE HAD THE FIELD YET AND REPLIED NO. I TOLD THE CAPT THAT I WOULD NOT RPT THE FIELD UNTIL HE HAD VISUAL AND THAT HIS ILS HAD BEEN IDENTED. ON THE BASE LEG, THE CAPT SAID HE HAD THE FIELD AND I RPTED IT TO TWR. THE CAPT STARTED TO TURN THE AIRPLANE FROM BASE TO AN INTERCEPT FOR RUETT (THE FAF) AND CALLED FOR FLAPS, THEN GEAR. I HAD TERRAIN MODE ENGAGED ON MY EFIS AND MAP DISPLAY WITH MY VOR TUNED TO BAL FOR DME. UPON COMPLETION OF THE LNDG CHKLST I DID NOT HAVE THE RWY IN SIGHT. I HAVE HAD PROBS PICKING OUT RWY 33L AT BWI AT NIGHT BEFORE, SO I SCANNED INSIDE. I NOTICED THAT RUETT WAS TO OUR R ON THE MAP DISPLAY. I TOLD THE CAPT THAT ACCORDING TO THE GPS WE NEEDED TO COME FURTHER R FOR RUETT. HE WANTED TWR TO TURN UP THE RWY LIGHTS. I REQUESTED TWR TO TURN UP THE LIGHTS AND SAID WE NEED TO LEVEL OFF AND COME R FOR RUETT. AT THIS POINT THE CAPT IN THE JUMP SEAT SAID SOMETHING ABOUT RADIO/NAV AND A MAP SHIFT. I RECONFIRMED MY RADIO/NAV SWITCH AND THEN ATC CALLED. TWR CALLED US WITH INSTRUCTIONS FOR A R TURN AND A CLB TO 2000 FT AT ABOUT THIS POINT. WHAT WE MISSED WAS THE CAPT'S RADIO/NAV SWITCH WAS IN NAV, HIS FMA WAS NOT IN ILS MODE, AND HIS CDI WAS PROVIDING AN INTERCEPT TO EMI VORTAC, NOT THE ILS. AN EXTENSION OF THE ILS CTRLINE WOULD HAVE DROPPED THE LINE TO EMI AND PROVIDED BETTER SITUATIONAL AWARENESS ON THE MAP DISPLAY THAN IS REQUIRED FOR EGPWS. ANOTHER FACTOR WAS CREW CURRENCY. THE CAPT WAS JUST RETURNING FROM A 4 MONTH HIATUS AND THE FO HAD ONLY 6 LEGS IN THE PAST 48 DAYS. SUPPLEMENTAL INFO FROM ACN 540651: OVER 4 MONTHS OUT OF COCKPIT. FIRST LINE TRIP BACK AT NIGHT. FIRST LEG FLOWN. OVERLOOKED GOING FROM NAV TO RADIO. CLRED FOR VISUAL TO RWY 33L TURNING BASE LEG. PNF HAD IDENTED ILS AND APCH HAD BEEN BRIEFED. I THOUGHT I WAS LOOKING AT A CTRED UP LOC, BUT WAS ACTUALLY WELL L OF COURSE, CTRED UP (180 DEGS OUT) ON MAGENTA LINE HDG FOR OM BEHIND ME. PNF SAID WE WERE L OF COURSE, BUT IN MY MIND I WAS STILL LOOKING AT A CTRED UP ILS. EMBARRASSED I COULDN'T SEE THE RWY YET AND TRYING TO RESOLVE THESE MIXED SIGNALS, WE GOT DOWN TO 1000 FT AGL BEFORE TWR CALLED FOR THE CLBING R TURN AND AN UNEVENTFUL SECOND TRY. LOW TIME COPLT NOT TO BLAME. MY LACK OF CURRENCY, FATIGUE LATE AT NIGHT, AND FIXATION ON AN INACCURATE (NAV MODE VICE RADIO ILS) INST PUT ME WAY BEHIND.

Synopsis :

A TRACK DEV ON A NIGHT VISUAL APCH WITH AN ILS BACK-UP RESULTS FROM AN IMPROPER COCKPIT APCH SET-UP.

Time

Date : 200203

Day : Tue

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : APF.Airport

State Reference : FL

Environment

Flight Conditions : VMC

Ceiling : CLR

Aircraft / 1

Controlling Facilities.Tower : APF.Tower

Operator.General Aviation : Personal

Make Model : Centurion/Turbo Centurion 210c

Mission : Business

Navigation In Use.Other : GPS

Flight Phase.Descent : Approach

Route In Use.Approach : Traffic Pattern

Route In Use.Approach : Visual

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 5000

Experience.Flight Time.Last 90 Days : 15

Experience.Flight Time.Type : 300

ASRS Report : 542658

Person / 2

Function.Observation : Passenger

Person / 3

Function.Controller : Local

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Non Adherence : Clearance

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Became Reoriented

Resolatory Action.Flight Crew : Returned To Intended or Assigned Course

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

WE WERE ON AN IFR FLT PLAN FROM LEE TO APR. WE HAD FILED DIRECT LAL, DIRECT RSW, DIRECT APF. ENRTE, THAT CLRNC WAS CHANGED TO RADAR VECTORS TO APF, AND AGAIN LATER TO DIRECT QUNCY, DIRECT RSW, DIRECT APF. SINCE WE HAD A NEW BENDIX/KING PANEL MOUNTED MOVING MAP GPS INSTALLED AND HAD NOT BECOME PROFICIENT IN ITS USE, WE ASKED FOR VECTORS TO QUNCY, WHICH WE RECEIVED. WE BACKED UP THE VECTORS WITH 2 VORS TO NAV TO THE INTXN AND ALSO ENTERED THE INTXN IN THE NEW GPS AS BACKUP. WE ALSO HAD A MOVING MAP GPS INSTALLED ON THE PLT YOKE. AS WE APCHED THE INTXN, WE QUERIED ZMA TO VERIFY THAT WE WERE ON THE CORRECT TRACK WHICH THEY CONFIRMED. WE CONTINUED ENRTE AND AS WE APCHED APF WE WERE CLRED FOR THE VISUAL APCH TO RWY 5. WE CONTACTED THE TWR WHICH ASKED US TO RPT 3 MI OUT, WHICH WE DID, AND THEN THEY CLRED US TO LAND ON RWY 5. AS WE WERE MANEUVERING IN THE PATTERN TO ENTER A DOWNWIND FOR RWY 5, WE WERE AGAIN DISTR BY THE NEW GPS. WHILE ATTEMPTING TO FOLLOW ELABORATE NOISE ABATEMENT PROCS WITH THE AID OF THE GPS, WE MISINTERPED THE GPS DATA AND BEGAN TO TURN FINAL TO THE WRONG RWY. AFTER CONFIRMING OUR HDG WITH THE HSI WE IMMEDIATELY RECOGNIZED OUR MISTAKE AND CORRECTED OUR TURN, RESUMED A NORMAL PATTERN AND LANDED WITHOUT INCIDENT ON RWY 5. THE CONFUSION CREATED WHILE APCHING QUNCY AND WHILE APCHING APF WAS IN PART DUE TO THE UNFAMILIARITY WITH THE NEW EQUIP AND PERHAPS AN OVER RELIANCE ON THE GPS EQUIP OVER CONVENTIONAL TECHNIQUES.

Synopsis :

C210 PLT TURNED FINAL FOR THE WRONG RWY DURING A VISUAL APCH DUE TO BECOMING CONFUSED WITH INFO FROM A GPS MAP DISPLAY. PLT RECOGNIZED HIS ERROR AND ADJUSTED HIS HDG TO THE CORRECT RWY.

Time

Date : 200204

Day : Mon

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : PAO.Airport

State Reference : CA

Altitude.AGL.Single Value : 1500

Environment

Flight Conditions : IMC

Aircraft / 1

Controlling Facilities.TRACON : O90.TRACON

Controlling Facilities.Tower : PAO.Tower

Operator.General Aviation : Personal

Make Model : King Air C90 E90

Mission : Pleasure

Navigation In Use.Other : GPS

Flight Phase.Descent : Approach

Route In Use.Approach : Instrument Non Precision

Component / 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 1040

Experience.Flight Time.Last 90 Days : 55

Experience.Flight Time.Type : 185

ASRS Report : 543239

Person / 2

Function.Controller : Approach

Person / 3

Function.Controller : Local

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.None Taken : Detected After The Fact

Consequence.Other : Maintenance Action

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

WHILE BEING VECTORED FOR THE FINAL APCH HEADING, RAIM WAS MOMENTARILY LOST FOR THE GPS APCH INTO PALO ALTO. BEFORE I COULD NOTIFY ATC THE RAIM WAS APPARENTLY RESTORED. I WAS UNAWARE THAT THE APCH MODE DID NOT RETURN TO 'ACTIVE,' THEREBY INCREASING THE CDI SENSITIVITY NEEDED TO MAKE AN ACCURATE APCH. I CONTINUED THE APCH AND BROKE OUT AT 1500 FT TO DISCOVER I WAS 1/4 MI TO THE R OF RWY CTRLINE. I CANCELED IFR AND WENT AROUND THE TFC PATTERN TO LAND. 1/4 MI WOULD APPEAR ACCEPTABLE NEEDLE DEFLECTION IN AN 'ARMED' APCH CDI MODE. I HAVE CONTACTED AN AVIONICS SHOP REGARDING THE TEMPORARY 'LOST RAIM.' THEY EXPLAINED THAT IT HAPPENS FROM TIME TO TIME. THIS EXPERIENCE SHOWS THAT THE ARMED/ACTIVE ANNUNCIATOR MUST BE INCLUDED IN THE INST APCH SCAN THROUGHOUT THE PROC.

Synopsis :

A BE9L PLT, MAKING A GPS APCH TO PAO, BROKE OUT ONE QUARTER MI TO THE R OF THE RWY CTRLINE.

Time

Date : 200205

Day : Sun

Local Time Of Day : 1201 To 1800

Place

State Reference : GA

Altitude.MSL.Single Value : 1800

Environment

Flight Conditions : Marginal

Ceiling.Single Value : 1200

Aircraft / 1

Controlling Facilities.ARTCC : ZJX.ARTCC

Operator.General Aviation : Personal

Make Model : Bonanza 33

Mission : Business

Navigation In Use.Other : GPS

Flight Phase.Descent : Approach

Route In Use.Enroute : Direct

Route In Use.Approach : Instrument Non Precision

Person / 1

Function.Flight Crew : Single Pilot

Experience.Flight Time.Total : 2800

Experience.Flight Time.Last 90 Days : 40

Experience.Flight Time.Type : 1400

ASRS Report : 546521

Person / 2

Function.Controller : Radar

Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Inflight Encounter : Weather

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Became Reoriented

Resolatory Action.Controller : Issued Advisory

Resolatory Action.Controller : Issued New Clearance

Supplementary

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Problem Areas : Weather

Narrative :

ARRIVING IN THE DEST AREA (SSI), ASOS RPTD WX AS CEILING 1200 FT OVCST, VISIBILITY 8 MI, ETC -- BASICALLY, MVFR. I WAS ABOUT 50 NM AWAY WHEN I COPIED THE ASOS AND REQUESTED FROM ZJX THE GPS APCH TO RWY 4 AT SSI. I WAS ADVISED TO REQUEST THAT FROM THE NEXT CTLR (ALSO ZJX) AND DID SO. AFTER SOME MINS, I WAS INSTRUCTED TO 'PROCEED TO THE IAF' FOR THE GPS. I REPLIED 'THAT WOULD BE CUDBU.' I WAS CLRED TO 1800 FT. I TURNED TO CUDBU AND DSND. NO FURTHER COM WAS RECEIVED FROM ZJX AND I PROCEEDED TO AND BEYOND CUDBU. I WAS FASCINATED WITH MY NEW IFR GPS AND TRYING TO ENSURE THAT I OPERATED IT CORRECTLY. I NOTED HEARING THE PLANE AHEAD OF ME CANCEL HIS IFR JUST PRIOR TO REACHING CUDBU. IMMEDIATELY AFTER TURNING ONTO THE INITIAL APCH SEGMENT (WHICH IS ABOUT A 15 MI FINAL), I REALIZED THAT I'D HEARD NOTHING FROM CTR SINCE 'PROCEED TOWARD THE INITIAL FIX....' I ADVISED CTR THAT I WAS INSIDE CUDBU. CTR REPLIED THAT I WAS 'CLRED CTR FREQ...CHANGE TO ADVISORY FREQ IS....' AND THEN SHE CUT HERSELF OFF AND SAID 'LET'S MAKE THIS RIGHT' (OR WORDS TO THAT EFFECT) AND CLRED ME FOR THE GPS 4 APCH. THE INITIAL DIRECTIVE TO PROCEED TOWARD THE INITIAL FIX WAS VAGUE, I WAS NOT TOLD TO EXPECT THAT APCH AND IT SEEMS I MUST HAVE LITERALLY AND MENTALLY GOTTEN LOST IN HER COVERAGE. CTR RADAR COVERAGE IS SPOTTY BELOW ABOUT 2500 FT HERE AND MAY HAVE IN FACT DROPPED BELOW HER COVERAGE AREA. I SHOULD HAVE BEEN MORE PROACTIVE ABOUT RPTING MY POS ALONG THE WAY TO CUDBU AND CERTAINLY ASKED FOR THE APCH CLRNC. FAILING THAT, I SHOULD HAVE ENTERED A HOLD (STANDARD) AT CUDBU AND RPTD THAT I'D ENTERED A HOLD PRIOR TO PROCEEDING. WORKING WITH THE NEW GPS WAS A DISTR ON MY END.

Synopsis :

A BE33 ATP PLT PROCEEDS PAST HIS INITIAL FIX CLRNC PRIOR TO RECEIVING ANY APCH CLRNC FROM ZJX FOR A GPS RWY 4 APCH TO SSI, GA.

Time

Date : 200206

Day : Fri

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : LAS.Airport

State Reference : NV

Aircraft / 1

Controlling Facilities.TRACON : L30.TRACON

Operator.Common Carrier : Air Carrier

Make Model : MD-80 Super 80

Mission : Passenger

Navigation In Use.Other : GPS

Flight Phase.Cruise : Level

Component / 1

Aircraft Component : DME

Aircraft Reference : X

Component / 2

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 551268

Person / 2

Function.Flight Crew : First Officer

ASRS Report : 551525

Person / 3

Function.Controller : Approach

Person / 4

Function.Controller : Supervisor

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.ControllerA : 3

Resolatory Action.Controller : Issued New Clearance

Consequence.FAA : Reviewed Incident With Flight Crew

Consequence.Other : Company Review

Supplementary

Problem Areas : Aircraft

Problem Areas : Airspace Structure

Problem Areas : Chart Or Publication

Problem Areas : Flight Crew Human Performance

Narrative :

DURING ARR TO LAS, CLARR1.SKEBR INTXN, CTLR ASKED IF WE WERE TURNING TO HDG 345 DEGS. WE REPLIED THAT WE WERE IN THE TURN. WE HAD A BACKUP NAV OF THE GPS, IN HDG SELECT TO 345 DEGS. WE COMPLETED THE TURN WITH A FOLLOW-UP 020 DEG HDG GIVEN BY THE CTLR. WE WERE AT 12000 FT, AT 250 KTS AT SKEBR AS ASSIGNED. AFTER THE CTLR ASSIGNED 020 DEG HDG, HE ASKED WHICH ARR WE WERE ON AND WE CONFIRMED CLARR1. WE WERE ASKED TO CALL THE APCH FACILITY ON THE GND. NO CONFLICTS OCCURRED. TALKING WITH THE SUPVR AT LAS, HE SAID THEIR RADAR SHOWED US APCHING THE LIMITS OF THEIR ARR AIRSPACE. THERE WERE NO CONFLICTS, BUT HE WAS CURIOUS AS TO WHAT EQUIP WE HAD, AS THEY HAVE HAD PREVIOUS PROBS WITH MILEAGE LIMITS ON RNAV EQUIPPED ACFT ON ALL AIRLINES. HE WAS INTERESTED IN THE MAKER OF OUR GPS, AS THEY ARE TRYING TO WORK OUT ANY FURTHER PROBS.

Synopsis :

AN S80 PIC IS ADVISED THAT HIS ACFT TURNED TO A HDG THAT WOULD TAKE HIM OUT OF THE APCH CTLR'S LIMITS ON THE CLARR 1 ARR INTO LAS, NV.